



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 181255

TO: Ruixiang Li
Location: REM-4D59/4C70
Art Unit: 1646

March 14 2006

Case Serial Number: 10/782596

From: P. Sheppard
Location: Remsen Building
Phone: (571) 272-2529

sheppard@uspto.gov

Search Notes

THIS PAGE BLANK (USPTO)

181255

STIC-Biotech/ChemLib

From: Li, Ruixiang
Sent: Saturday, March 04, 2006 9:34 AM
To: STIC-Biotech/ChemLib
Subject: Sequence search of Application No.10/782,596

Please do a standard search on:

(i). SEQ ID NO: 20 against amino acid databases (excluding pending databases).

Thank you very much!

Ruixiang Li
GAU 1646
REM 4D59
Mail Box 4C70
(571) 272-0875

Searcher: _____
Searcher Phone: _____
Date Searcher Picked up: _____
Date completed: _____
Searcher Prep Time: _____
Online Time: _____

Type of Search
NA# _____ AA# _____
S/L: _____ Oligomer: _____
Encode/Transl: _____
Structure #: _____ Text: _____
Inventor: _____ Litigation: _____

Vendors and cost where applicable
STN: _____
DIALOG: _____
QUESTEL/ORBIT: _____
LEXIS/NEXIS: _____
SEQUENCE SYSTEM: _____
WWW/Internet: _____
Other (Specify): _____

THIS PAGE BLANK (USPTO)

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioacceleration Ltd.

OM protein - protein search, using bw model

Run on: March 7, 2006, 12:47:14 ; Search time 232 seconds
(without alignments)

1134.319 Million cell updates/sec

Title: US-10-782-596-20

Perfect score: 1992
Sequence: 1 MANTTGEPEEVSALSPPSA.....HAPCWGTGAPAPREPCVM 373

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2166443 seqs, 705528306 residues

Total number of hits satisfying chosen parameters: 2166443

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Uniprot_05.80:*
1: uniprot_sprot:*
2: uniprot_trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1986	99.7	373	1 GP173_HUMAN	Q9ns66 homo sapien
2	1986	99.7	373	2 Q5HYQ4_HUMAN	Q5HYQ4 mus musculu
3	1977	99.2	373	1 Q5E9H8_BOVIN	Q5E9H8 bos taurus
4	1975	99.1	373	1 GP173_MOUSE	Q6p162 mus musculu
5	1975	99.1	373	1 GP173_RAT	Q9j1h2 rattus norv
6	1975	99.1	373	2 Q4VA66_MOUSE	Q4VA66 mus musculu
7	1625.5	81.6	387	1 GP173_BRARE	Q91919 brachydantio
8	1464	73.5	349	2 Q4S5Y6_TETNG	Q4S5Y6 tetraodon n
9	1344	67.5	328	2 Q4T258_TETNG	Q4T258 tetraodon n
10	1291.5	64.8	370	2 Q5U576_XENLA	Q5U576 xenopus lae
11	1291.5	64.8	371	2 Q4RHK7_TETNG	Q4RHK7 tetraodon n
12	1288.5	64.7	370	1 GPR85_HUMAN	P60893 homo sapien
13	1288.5	64.7	370	1 GPR85_MOUSE	P60893 mus musculu
14	1288.5	64.7	370	1 GPR85_RAT	P60895 rattus norv
15	1288.5	64.7	370	2 Q8NEN2_HUMAN	Q8NEN2 homo sapien
16	1288.5	64.7	370	2 Q6ZMR2_MOUSE	Q6ZMR2 mus musculu
17	1288.5	64.7	371	1 GPR85_BRARE	Q91919 brachydantio
18	1278.5	64.2	370	2 Q5R8G7_PONPY	Q5R8G7 pongo pygma
19	1129	56.7	292	2 Q4SR11_TETNG	Q4SR11 tetraodon n
20	1031	51.8	375	1 GPR27_HUMAN	Q9ns67 homo sapien
21	1023	51.4	377	1 GPR27_RAT	Q9j1h3 rattus norv
22	1022	51.3	379	1 GPR27_MOUSE	Q54837 mus musculu
23	963	48.3	187	2 Q8OT44_MOUSE	Q8OT44 mus musculu
24	583	29.3	281	2 Q4R8W0_MACFA	Q4R8W0 macaca fasc
25	275	13.8	357	2 Q6TLJ0_MUSPF	Q6TLJ0 muscicola put
26	274	13.6	501	2 Q4T4F3_TETNG	Q4T4F3 tetraodon n
27	270.5	13.6	456	2 Q8T0Y4_APIRE	Q8T0Y4 apis mellif
28	269.5	13.5	470	1 SHT2A_FIG	P50139 sus scrofa
29	267.5	13.4	470	1 SHT2A_BOVIN	Q75289 bos taurus
30	266.5	13.4	470	1 SHT2A_CANFA	Q46635 canis famli
31	266.5	13.4	470	2 Q50D29_CANFA	Q50D29 canis famli

32	264	13.3	387	1 DRD4_MOUSE	P51436 mus musculu
33	264	13.3	389	2 Q7TT80_MOUSE	Q7TT80 mus musculu
34	261.5	13.1	387	2 Q8BX54_MOUSE	Q8BX54 mus musculu
35	261	13.1	382	2 Q5DJ14_BRARE	Q5DJ14 brachydantio
36	261	13.1	400	1 DRD3_PANTR	Q51572 pan troglod
37	260	13.1	400	1 DRD3_HUMAN	P35462 homo sapien
38	260	13.1	400	2 Q4VBM8_HUMAN	Q4VBM8 homo sapien
39	259.5	13.0	471	1 SHT2A_CRIGR	P18599 cricetus
40	259.5	13.0	471	1 SHT2A_MACMU	P50128 macaca mula
41	259.5	13.0	471	1 SHT2A_MOUSE	P35363 mus musculu
42	259.5	13.0	471	1 SHT2A_RAT	P14842 rattus norv
43	259.5	13.0	471	2 Q543D4_MOUSE	Q543D4 mus musculu
44	258	13.0	439	2 Q5ISK8_MACFA	Q5ISK8 macaca fasc
45	257	12.9	471	1 SHT2A_HUMAN	P28223 homo sapien

ALIGNMENTS

RESULT 1
GP173_HUMAN STANDARD; PRT; 373 AA.
ID GP173_HUMAN
AC Q9NS66;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 10-MAY-2005 (Rel. 47, Last annotation update)
DE Probable G-protein coupled receptor 173 (Super conserved receptor expressed in brain 3).
GN Name=GP173; Synonyms=SRRB3;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Homnidae;
OC Homo.
OX NCBI_TaxID=9606;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RC TISSUE=Brain;
RP NUCLEOTIDE SEQUENCE.
RX MEDLINE=20294882; PubMed=10833454; DOI=10.1006/dbrc.2000.2829;
RA Matsumoto M., Saito T., Takasaki J., Kamohara M., Sugimoto T., Kobayashi M., Tadokoro M., Matsumoto S., Ohishi T., Fumichi K.;
RT "An evolutionarily conserved G-protein coupled receptor family, SRRB, expressed in the central nervous system."
RL Biochem. Biophys. Res. Commun. 272:576-582 (2000).
RL [2]
RP NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
RC TISSUE=Lung;
RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G., Schuler G.D., Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Bhat N.K., Altschul S.F., Zeeberg B., Buettow K.H., Schaefer C.F., Hsieh F., Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Heide F., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldi M.P., Casavant T.L., Scheetz T.E., Brownstein M.J., Ustin T.B., Toshlyuk S., Carninci P., Prange C., Raha S.S., Loughran J.A., Peters G.J., Abrahams R.D., Mullaly S.J., Bosak S.A., McMan P.J., McKernan K.J., Malek J.A., Gunaratne P.H., Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W., Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Fahey J., Heltan E., Kettelman M., Wadon A., Rodriguez S., Sanchez A., Whiting M., Madan A., Young A.C., Shevchenko Y., Boufard G.G., Blakeley R.W., Touchman J.W., Green E.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smaluk D.E., Scherch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences."
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
CC -1- FUNCTION: Orphan receptor.
CC -1- SUBCELLULAR LOCATION: Integral membrane protein (By similarity).
CC -1- TISSUE SPECIFICITY: Expressed at high levels in brain and ovary.
CC Lower levels in small intestine. In brain regions, detected in all regions tested. Highest levels in the cerebellum and cerebral cortex.

CC -1- SIMILARITY: Belongs to the G-protein coupled receptor 1 family.

CC This Swiss-Prot entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use as long as its content is in no way modified and this statement is not
CC removed.

CC EMBL; AB040801; BAA96647.1; -; mRNA.
CC EMBL; BC009861; AA009861.1; -; mRNA.
CC PIR; JCT289; JCT289.
CC Ensembl; ENSG00000184194; Homo sapiens.
CC HGNC; HGNC:18186; GPR173.
CC H-InvDB; HIX0022972; -.
CC MIM; 300253; -.
CC DR GO; GO:0004930; F-G-protein coupled receptor activity; TAS.
CC DR GO; GO:0007165; P:signal transduction; TAS.
CC DR InterPro; IPR000276; GPCR_Rhodopsn.
CC DR Pfam; PF00001; 7tm_1; 1.
CC DR PRINTS; PR00237; GPCR_RHODOPSN.
CC DR PROSITE; PS00237; G_PROTEIN_RECEP_F1_1; FALSE_NEG.
CC KW G-protein coupled receptor; Glycoprotein; Multigene family; Receptor;
CC Transducer; Transmembrane.
CC FT TOPO_DOM 1 26 Extracellular (Potential).
CC FT TRANSMEM 27 47 1 (Potential).
CC FT TOPO_DOM 48 59 Cytoplasmic (Potential).
CC FT TRANSMEM 60 80 2 (Potential).
CC FT TOPO_DOM 81 97 Extracellular (Potential).
CC FT TRANSMEM 98 118 3 (Potential).
CC FT TOPO_DOM 119 139 Cytoplasmic (Potential).
CC FT TRANSMEM 140 160 4 (Potential).
CC FT TOPO_DOM 161 188 Extracellular (Potential).
CC FT TRANSMEM 189 209 5 (Potential).
CC FT TOPO_DOM 210 287 Cytoplasmic (Potential).
CC FT TRANSMEM 288 308 6 (Potential).
CC FT TOPO_DOM 309 322 Extracellular (Potential).
CC FT TRANSMEM 323 343 7 (Potential).
CC FT TOPO_DOM 344 373 Cytoplasmic (Potential).
CC FT CARBDOM 3 3 N-linked (GlcNAc . .) (Potential).
CC FT CARBDOM 184 184 N-linked (GlcNAc . .) (Potential).
CC FT DISULFID 96 174 By similarity.
CC SQ SEQUENCE 373 AA; 41481 MW; 8A227F914C9D8358 CRC64;

Query Match 99.7%; Score 1986; DB 1; Length 373;
Best Local Similarity 99.7%; Pred. NO. 1.9e-145;
Matches 372; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

DB 361 GGAPAPREPYCVM 373
|||||
RESULT 2
ID QSHY04_HUMAN PRELIMINARY; PRT; 373 AA.
AC QSHY04;
DT 10-MAY-2005 (Tremblrel. 30, Created)
DT 10-MAY-2005 (Tremblrel. 30, Last sequence update)
DT 10-MAY-2005 (Tremblrel. 30, Last annotation update)
DE G-protein coupled receptor 173.
GN Name=GPR173; ORFNames=RPL-290F12.1-001;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Homiidae;
OC Homo
OX NCBI_TaxId=9606;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RA Howden P.;
RL Submitted (MAY-2005) to the EMBL/Genbank/DBJ databases.
CC -1- SUBCELLULAR LOCATION: Integral membrane protein (By similarity).
CC EMBL; BX322635; CAI42530.1; -; Genomic DNA.
CC DR GO; GO:0016021; C:integral to membrane; IEA.
CC DR GO; GO:0004872; F:receptor activity; IEA.
CC DR GO; GO:000584; F:rhodopsin-like receptor activity; IEA.
CC DR GO; GO:0007186; P:G-protein coupled receptor activity; IEA.
CC DR InterPro; IPR000276; GPCR_Rhodopsn.
CC DR Pfam; PF00001; 7tm_1; 1.
CC DR PRINTS; PR00237; GPCR_RHODOPSN.
CC DR PROSITE; PS00262; G_PROTEIN_RECEP_F1_2; 1.
CC KW G-protein coupled receptor; Receptor; Transducer; Transmembrane.
CC SQ SEQUENCE 373 AA; 41481 MW; 8A227F914C9D8358 CRC64;

Query Match 99.7%; Score 1986; DB 2; Length 373;
Best Local Similarity 99.7%; Pred. NO. 1.9e-145;
Matches 372; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

DB 361 GGAPAPREPYCVM 373
|||||
RESULT 3
ID QSE9H8_BOVIN PRELIMINARY; PRT; 373 AA.
AC QSE9H8;
DT 10-MAY-2005 (Tremblrel. 30, Created)


```

CC TOPO DOM 309 322 Extracellular (Potential).
FT TRANSMEM 323 343 7 (Potential).
FT TOPO DOM 344 373 Cytoplasmic (Potential).
FT CARBOHYD 3 3 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 184 184 N-linked (GlcNAc...) (Potential).
FT DISULFID 96 174 By similarity.
SQ SEQUENCE 373 AA; 41511 MW; C06DEA2F0B88C6F5 CRC64;

Query Match
Best Local Similarity 99.1%; Score 1975; DB 1; Length 373;
Matches 370; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

CC 1 MANTTGEPEEVSAGSLSPSASAYVVKLVLLGLIMCVSLAGNALISLVLKERALHKAPYF 60
DB 1 MANTTGEPEEVSAGSLSPSASAYVVKLVLLGLIMCVSLAGNALISLVLKERALHKAPYF 60
QY 61 LIDLCLADGIRSAVCEPFLVLAIVRHSSWTFPSALSKTIYAFMAVLFCHFAAFMLFCISVT 120
DB 61 LIDLCLADGIRSAICFPFLVLAIVRHSSWTFPSALSKTIYAFMAVLFCHFAAFMLFCISVT 120
QY 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLVSAMAPPPVDGYTFIRIBDQCIFEHRY 180
DB 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLVSAMAPPPVDGYTFIRIBDQCIFEHRY 180
QY 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLVSAMAPPPVDGYTFIRIBDQCIFEHRY 180
DB 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLVSAMAPPPVDGYTFIRIBDQCIFEHRY 180
QY 181 FRANDTIGFMLMLAVLMAATHAVYGGKLLFEYRHRMKKEVQWVPALSONMTFHGPATGQ 240
DB 181 FRANDTIGFMLMLAVLMAATHAVYGGKLLFEYRHRMKKEVQWVPALSONMTFHGPATGQ 240
QY 241 AAANWJAGFGRGMPPTLLGIRONGHAASRRLLGMDVGEKQLGMPFYAITLLFLLWS 300
DB 241 AAANWJAGFGRGMPPTLLGIRONGHAASRRLLGMDVGEKQLGMPFYAITLLFLLWS 300
QY 241 AAANWJAGFGRGMPPTLLGIRONGHAASRRLLGMDVGEKQLGMPFYAITLLFLLWS 300
DB 241 AAANWJAGFGRGMPPTLLGIRONGHAASRRLLGMDVGEKQLGMPFYAITLLFLLWS 300
QY 301 PYIVACYMVFYVYKACVPHRYLATAVWMSFAQAANPPIVCFILNKDKKCLRTTHACWGT 360
DB 301 PYIVACYMVFYVYKACVPHRYLATAVWMSFAQAANPPIVCFILNKDKKCLRTTHACWGT 360
QY 361 GGAPAREPEYCVW 373
DB 361 GGAPAREPEYCVW 373

RESULT 5
GP173 RAT STANDARD; PRT; 373 AA.
ID GP173 RAT
AC Q9UHR2;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 10-MAY-2005 (Rel. 47, Last annotation update)
DE Probable G-protein coupled receptor 173 (Super conserved receptor
DE expressed in brain 3).
GN Name=Gpr173; Synonyms=Sreb3;
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
OC Muridae; Muridae; Murinae; Rattus.
OC NCBI_TaxID=10116;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RX MEDLINE=20294882; PubMed=10833454; DOI=10.1006/bdrc.2000.2829;
RA Matsumoto M., Saito T., Takasaki J., Kamohara S., Sugimoto T.,
RA Kobayashi M., Tadokoro M., Matsumoto S., Ohishi T., Furutachi K.,
RT "An evolutionarily conserved G-protein coupled receptor family, SREB,
RT expressed in the central nervous system."
RT Biochem. Biophys. Res. Commun. 272:576-582(2000).
CC -1- FUNCTION: Orphan receptor.
CC -1- SUBCELLULAR LOCATION: Integral membrane protein (By similarity).
CC -1- SIMILARITY: Belongs to the G-protein coupled receptor 1 family.
CC This Swiss-Prot entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation
CC the European Bioinformatics Institute. There are no restrictions on its
CC use as long as its content is in no way modified and this statement is not

```

```

CC removed.
CC -----
CC EMBL; AB040804; BAA9650.1; -; mRNA.
CC RGD; 620748; Sreb3.
CC InterPro; IPR00276; GPCR_Rhodopsn.
CC Pfam; PF00001; 7tm.1; 1.
CC PRINTS; PR00237; GPCR_RHODOPSIN.
CC PROSITE; PS00237; G_PROTEIN_RECEP_F1_1; FALSE_NEG.
CC PROSITE; PS0262; G_PROTEIN_RECEP_F1_2; 1.
CC G-protein coupled receptor; Glycoprotein; Multigene family; Receptor;
CC Transducer; Transmembrane.
CC TOPO DOM 1 26 Extracellular (Potential).
FT TRANSMEM 27 47 1 (Potential).
FT TOPO DOM 48 59 Cytoplasmic (Potential).
FT TRANSMEM 60 80 2 (Potential).
FT TOPO DOM 81 97 Extracellular (Potential).
FT TRANSMEM 98 118 3 (Potential).
FT TOPO DOM 119 139 Cytoplasmic (Potential).
FT TRANSMEM 140 160 4 (Potential).
FT TOPO DOM 161 188 Extracellular (Potential).
FT TRANSMEM 189 209 5 (Potential).
FT TOPO DOM 210 287 Cytoplasmic (Potential).
FT TRANSMEM 288 308 6 (Potential).
FT TOPO DOM 309 322 Extracellular (Potential).
FT TRANSMEM 323 343 7 (Potential).
FT TOPO DOM 344 373 Cytoplasmic (Potential).
FT CARBOHYD 3 3 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 184 184 N-linked (GlcNAc...) (Potential).
FT DISULFID 96 174 By similarity.
SQ SEQUENCE 373 AA; 41511 MW; C06DEA2F0B88C6F5 CRC64;

Query Match
Best Local Similarity 99.1%; Score 1975; DB 1; Length 373;
Matches 370; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

CC 1 MANTTGEPEEVSAGSLSPSASAYVVKLVLLGLIMCVSLAGNALISLVLKERALHKAPYF 60
DB 1 MANTTGEPEEVSAGSLSPSASAYVVKLVLLGLIMCVSLAGNALISLVLKERALHKAPYF 60
QY 61 LIDLCLADGIRSAVCEPFLVLAIVRHSSWTFPSALSKTIYAFMAVLFCHFAAFMLFCISVT 120
DB 61 LIDLCLADGIRSAICFPFLVLAIVRHSSWTFPSALSKTIYAFMAVLFCHFAAFMLFCISVT 120
QY 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLVSAMAPPPVDGYTFIRIBDQCIFEHRY 180
DB 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLVSAMAPPPVDGYTFIRIBDQCIFEHRY 180
QY 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLVSAMAPPPVDGYTFIRIBDQCIFEHRY 180
DB 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLVSAMAPPPVDGYTFIRIBDQCIFEHRY 180
QY 181 FRANDTIGFMLMLAVLMAATHAVYGGKLLFEYRHRMKKEVQWVPALSONMTFHGPATGQ 240
DB 181 FRANDTIGFMLMLAVLMAATHAVYGGKLLFEYRHRMKKEVQWVPALSONMTFHGPATGQ 240
QY 241 AAANWJAGFGRGMPPTLLGIRONGHAASRRLLGMDVGEKQLGMPFYAITLLFLLWS 300
DB 241 AAANWJAGFGRGMPPTLLGIRONGHAASRRLLGMDVGEKQLGMPFYAITLLFLLWS 300
QY 241 AAANWJAGFGRGMPPTLLGIRONGHAASRRLLGMDVGEKQLGMPFYAITLLFLLWS 300
DB 241 AAANWJAGFGRGMPPTLLGIRONGHAASRRLLGMDVGEKQLGMPFYAITLLFLLWS 300
QY 301 PYIVACYMVFYVYKACVPHRYLATAVWMSFAQAANPPIVCFILNKDKKCLRTTHACWGT 360
DB 301 PYIVACYMVFYVYKACVPHRYLATAVWMSFAQAANPPIVCFILNKDKKCLRTTHACWGT 360
QY 361 GGAPAREPEYCVW 373
DB 361 GGAPAREPEYCVW 373

RESULT 6
Q4VA66_MOUSE
ID Q4VA66_MOUSE PRELIMINARY; PRT; 373 AA.
AC Q4VA66;
DT 13-SEP-2005 (TrEMBLrel. 31, Created)
DT 13-SEP-2005 (TrEMBLrel. 31, Last sequence update)
DT 13-SEP-2005 (TrEMBLrel. 31, Last annotation update)
DE Super conserved receptor expressed in brain 3.
GN Name=Gpr173;

```


OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
OC Muridae; Muridae; Murinae; Mus.
NCBI_TaxID=10090;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RC STRAIN=C57BL/6; TISSUE=Mouse;
RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G., Schuler G.D.,
Klauser R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
Holtshuij S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh L.,
Dietzenko L., Marusik A., Farmer A.A., Rubin G.M., Hong L.,
Dietzenko M., Soares M.B., Bonaldi M.F., Casavant T.L., Schreier T.E.,
Brownstein M.J., Uebachs T.B., Toshiki S., Carninci P., Prange C.,
Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullany S.J.,
Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
Richards S., Morley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
Fahy J., Hellon E., Kettelman M., Madan A., Rodriguez S., Sanchez A.,
Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
Ruttenberg A.S., Kravitz M.I., Skalska U., Smailus D.E.,
Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
and mouse cDNA sequences.";
RT Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN [2]
RP NUCLEOTIDE SEQUENCE.
RC STRAIN=C57BL/6; TISSUE=Mouse;
RG NIH MGC Project.
CC Submitted (May-2005) to the EMBL/GenBank/DBJ databases.
CC -1- SUBCELLULAR LOCATION: Integral membrane protein (By similarity).
CC EMBL: BC096520, AA96520.1; -; mRNA.
CC MGI: MGI:1918021, Gpr173.
CC InterPro: IPR000276; GPCR_Rhodopsin.
DR Pfam: PF00001, 7tm1.1, 1.
DR PRINTS: PR00237; GPCR_Rhodopsin.
DR PROSITE: PS50262; G_PROTEIN_RECEP_F1_2, 1.
KW G-protein coupled receptor; Receptor; Transducer; Transmembrane.
*SEQUENCE 373 AA; 4151 MW; C06DEA2F0E88CAF5 CRC64;
Query Match: 99.1%; Score 1975; DB 2; Length 373;
Best Local Similarity: 99.2%; Pred. No. 1,3e-144;
Matches 370; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

DB 361 GGAPAREPVCVM 373
|||||
RESULT 7
ID GP173_BRAE STANDARD; PRT; 387 AA.
AC 091918;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 10-MAY-2005 (Rel. 47, Last annotation update)
DE Probable G-protein coupled receptor 173 (Super conserved receptor
expressed in brain 3).
GN Name=gpr173; Synonyms=sreb3;
OS Brachydanio rerio (Zebrafish).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
OC Cyprinidae; Danio.
NCBI_TaxID=7955;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RX MEDLINE=20294882; PubMed=10833454; DOI=10.1006/dbrc.2000.2829;
RA Matsumoto M., Saito T., Takasaki J., Kamohara M., Sugimoto T.,
Kobayashi M., Tadokoro M., Matsumoto S., Ohishi T., Furukichi K.;
RT "An evolutionarily conserved G-protein coupled receptor family, SREB,
expressed in the central nervous system.";
RT Biochem. Biophys. Res. Commun. 272:576-582(2000).
CC -1- FUNCTION: Orphan receptor.
CC -1- SUBCELLULAR LOCATION: Integral membrane protein (By similarity).
CC -1- SIMILARITY: Belongs to the G-protein coupled receptor 1 family.

CC This Swiss-Prot entry is copyright. It is produced through a collaboration
between the Swiss Institute of Bioinformatics and the EMBL outstation -
the European Bioinformatics Institute. There are no restrictions on its
use as long as its content is in no way modified and this statement is not
removed.
CC EMBL: AB040806; BAA9652.1; -; Genomic DNA.
CC ZFIN: ZDB-GENE-000710-1; gpr173.
DR InterPro: IPR000276; GPCR_Rhodopsin.
DR Pfam: PF00001, 7tm1.1, 1.
DR PRINTS: PR00237; GPCR_Rhodopsin.
DR PROSITE: PS50237; G_PROTEIN_RECEP_F1_1; FALSE_NEG.
DR PROSITE: PS50262; G_PROTEIN_RECEP_F1_2, 1.
KW G-protein coupled receptor; Glycoprotein; Multigene family; Receptor;
FT Transducer; Transmembrane.
FT TOPO_DOM 1 40 Extracellular (Potential).
FT TRANSMEM 41 61 1 (Potential).
FT TOPO_DOM 62 87 2 (Potential).
FT TRANSMEM 88 108 Extracellular (Potential).
FT TOPO_DOM 109 111 3 (Potential).
FT TRANSMEM 112 132 4 (Potential).
FT TOPO_DOM 133 153 Cytoplasmic (Potential).
FT TRANSMEM 154 174 5 (Potential).
FT TOPO_DOM 175 202 Extracellular (Potential).
FT TRANSMEM 203 223 6 (Potential).
FT TOPO_DOM 224 301 Cytoplasmic (Potential).
FT TRANSMEM 302 322 7 (Potential).
FT TOPO_DOM 323 335 Extracellular (Potential).
FT TRANSMEM 336 356 8 (Potential).
FT TOPO_DOM 357 387 Cytoplasmic (Potential).
FT CARBOHYD 5 5 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 198 198 N-linked (GlcNAc...) (Potential).
FT DISULFID 110 188 By similarity.
SQ SEQUENCE 387 AA; 43410 MW; 5E094EFD4420871 CRC64;
Query Match: 81.6%; Score 1625.5; DB 1; Length 387;
Best Local Similarity: 80.4%; Pred. No. 1.5e-117;
Matches 300; Conservative 25; Mismatches 45; Indels 3; Gaps 1;

```

OY 61 LLDLCLADGIRSAVCPFFVLASVRHSGSSWTFSAISCKIVAFMAVLFCEFAAFMLFCISVT 120
DB 75 LLDLCLADGIRSAVCPFFVLASVRHSGSSWTFSAISCKIVAFMAVLFCEFAAFMLFCISVT 134
OY 121 RYMAIAHHRFVYAKRMTLTCAVTCAMTSLSVAMAPPPVDVGTGYTFIREEDQCIFEHRY 180
DB 135 RYMAIAHHRFVYAKRMTLTCAVTCAMTSLSVAMAPPPVDVGTGYTFIREEDQCIFEHRY 194
OY 181 FXANDTLGFMMLMAVLMMAATTHAVYGLLLFEYRHRKRPVOMVPAISQMTFHPGATGQ 240
DB 195 FXANDTLGFMMLMAVLMMAATTHAVYGLLLFEYRHRKRPVOMVPAISQMTFHPGATGQ 254
OY 241 AAANWAGFGGPMPTLLGIRONGHAASRRLGMDVEYGEKQDGRMFYATLLFLILMS 300
DB 255 AAANWAGFGGPMPTLLGIRONGHAASRRLGMDVEYGEKQDGRMFYATLLFLILMS 314
OY 301 PYIVACYRWFVYKACVPHRYLATVWMSFAQAAVNPVYICELNKLKCLTTHACMGT 360
DB 315 PYIVACYRWFVYKACVPHRYLATVWMSFAQAAVNPVYICELNKLKCLTTHACMGT 374
OY 361 GGAPARBPBYCVM 373
DB 375 TTPQLREBYCYVM 387

*RESULT 8
OAS5Y6_TETNG PRELIMINARY; PRT; 349 AA.
ID QAS5Y6_TETNG PRELIMINARY; PRT; 349 AA.
AC QAS5Y6_TETNG PRELIMINARY; PRT; 349 AA.
DT 13-SEP-2005 (TREMBLREL. 31, Created)
DT 13-SEP-2005 (TREMBLREL. 31, Last sequence update)
DT 13-SEP-2005 (TREMBLREL. 31, Last annotation update)
DE Chromosome 9 SCAPI4729, whole genome shotgun sequence.
DE (Fragment).
GN ORFNames=GSTENG00023531001;
OS Tetraodon nigroviridis (Green puffer).
OC Eukaryota; Metazoa; Chordata; Craniata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC Acanthomorpha; Acanthopterygii; Percormorpha; Tetraodontiformes;
OC Tetraodontidae; Tetraodontidae; Tetraodon.
OC NCBI_TaxId=99883;
OX NCBI_TaxId=99883;
RN NP NUCLEOTIDE SEQUENCE.
RP Jallion O., Aury J.M., Brunet F., Petit J.L., Strange-Thomann N.,
RA Mauceli E., Bouneau L., Fischer C., Ozouf-Costaz C., Bernot A.,
RA Nicard S., Jaffe D., Fisher S., Lutfalla G., Dossat C., Segurens B.,
RA Dasilva C., Salanoubat M., Levy M., Boudet N., Castellano S.,
RA Anthouard V., Jubin C., Castell V., Katinka M., Vacherie B.,
RA Biemont C., Skalli Z., Cattolico L., Poulain J., De Berardinis V.,
RA Cruaud C., Duprat S., Brottier P., Coutanceau J.P., Gouzy J.,
RA Parra G., Lardier G., Chappie C., McKernan K.J., McEwan P., Bosak S.,
RA Kellis M., Volff J.N., Guigo R., Zody M.C., Mesirov J.,
RA Lindblad-Toh K., Birren B., Nusbaum C., Kahn D., Robinson-Rechavi M.,
RA Lander V., Schachter V., Querier F., Saurin W., Scarpelli C.,
RA Wincker P., Lander E.S., Weissbach J., Roest Crolius H.;
RT "Genome duplication in the teleost fish Tetraodon nigroviridis reveals
RT the early vertebrate proco-karyotype."
RT Nature 431:946-957(2004).
RN NP NUCLEOTIDE SEQUENCE.
RP Genoscope; Whitehead Institute Centre for Genome Research;
RG Submitted (FEB-2004) to the EMBL/GenBank/DBJ databases.
CC -1- CAUTION: The sequence shown here is derived from an
CC EMBL/GenBank/DBJ whole genome shotgun (WGS) entry which is
CC preliminary data.
CC EMBL; CAE01014729; GAG03946.1; -; Genomic_DNA.
CC InterPro: IPR000276; GPCR_Rhodopsin.
DR Pfam: PF00001; 7tm_1; 1.1.
DR PRINTS; PR00237; GPCR_Rhodopsin.
DR PROSITE; PS50262; G_PROTEIN_RECEP_F1_2; 1.
KM G-protein coupled receptor; Receptor; Transducer; Transmembrane.
FT NON_TER 1

```

```

SQ SEQUENCE 349 AA; 39392 MW; 9C8AAA81B4F7C722 CRC64;
Query Match 73.5%; Score 1464; DB 2; Length 349;
Best Local Similarity 80.0%; Pred. No. 4.2e-105;
Matches 260; Conservative 35; Mismatches 30; Indels 0; Gaps 0;

OY 13 GALSPPSASAYKVLVLGLIMCVSLAGNAIISLVLKRRALHKAPYFLDCLADGIRS 72
DB 1 GGISATDVSAVFKVFLGLITCVSLVGNLVSLLVLRDRDLTKAPYFLDCLADGIRS 60
OY 73 AVCFPFVLASVRHSGSSWTFSAISCKIVAFMAVLFCEFAAFMLFCISVTRYMAIAHHRFYA 132
DB 61 AACFPFVLASVHNSAMTYSAISCKIVAFMAVLFCEFAAFMLFCVAVTRYMAIAHHRFYA 120
OY 133 KMTLTMTCAVTCAMTSLSVAMAPPPVDVGTGYTFIREEDQCIFEHRYKANDTLGFMML 192
DB 121 KMTLTMTCAVTCAMTSLSVAMAPPPVDVGTGYTFIREEDQCIFEHRYKANDTLGFMML 180
OY 193 LAVMAATTHAVYGLLLFEYRHRKRPVOMVPAISQMTFHPGATGQAAANWAGFGG 252
DB 181 LAVVLAATHGFYAKLLFEYRHRKRPVOMVPAISQMTFHPGATGQAAANWAGFGG 240
OY 253 PMPPTLLGIRONGHAASRRLGMDVEYGEKQDGRMFYATLLFLILMSPYIVACYRWFV 312
DB 241 PMPPTLLGIRONGHAASRRLGMDVEYGEKQDGRMFYATLLFLILMSPYIVACYRWFV 300
OY 313 KACAVPHRYLATVWMSFAQAAVNP 337
DB 301 KCSIPHYGLSITVWMSFAQAAVNP 325

*RESULT 9
O4T258_TETNG PRELIMINARY; PRT; 328 AA.
ID O4T258_TETNG PRELIMINARY; PRT; 328 AA.
AC O4T258_TETNG PRELIMINARY; PRT; 328 AA.
DT 13-SEP-2005 (TREMBLREL. 31, Created)
DT 13-SEP-2005 (TREMBLREL. 31, Last sequence update)
DT 13-SEP-2005 (TREMBLREL. 31, Last annotation update)
DE Chromosome undetermined SCAPI0335, whole genome shotgun sequence.
DE (Fragment).
GN ORFNames=GSTENG000848001;
OS Tetraodon nigroviridis (Green puffer).
OC Eukaryota; Metazoa; Chordata; Craniata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC Acanthomorpha; Acanthopterygii; Percormorpha; Tetraodontiformes;
OC Tetraodontidae; Tetraodontidae; Tetraodon.
OC NCBI_TaxId=99883;
OX NCBI_TaxId=99883;
RN NP NUCLEOTIDE SEQUENCE.
RP Jallion O., Aury J.M., Brunet F., Petit J.L., Strange-Thomann N.,
RA Mauceli E., Bouneau L., Fischer C., Ozouf-Costaz C., Bernot A.,
RA Nicard S., Jaffe D., Fisher S., Lutfalla G., Dossat C., Segurens B.,
RA Dasilva C., Salanoubat M., Levy M., Boudet N., Castellano S.,
RA Anthouard V., Jubin C., Castell V., Katinka M., Vacherie B.,
RA Biemont C., Skalli Z., Cattolico L., Poulain J., De Berardinis V.,
RA Cruaud C., Duprat S., Brottier P., Coutanceau J.P., Gouzy J.,
RA Parra G., Lardier G., Chappie C., McKernan K.J., McEwan P., Bosak S.,
RA Kellis M., Volff J.N., Guigo R., Zody M.C., Mesirov J.,
RA Lindblad-Toh K., Birren B., Nusbaum C., Kahn D., Robinson-Rechavi M.,
RA Lander V., Schachter V., Querier F., Saurin W., Scarpelli C.,
RA Wincker P., Lander E.S., Weissbach J., Roest Crolius H.;
RT "Genome duplication in the teleost fish Tetraodon nigroviridis reveals
RT the early vertebrate proco-karyotype."
RT Nature 431:946-957(2004).
RN NP NUCLEOTIDE SEQUENCE.
RP Genoscope; Whitehead Institute Centre for Genome Research;
RG Submitted (FEB-2004) to the EMBL/GenBank/DBJ databases.
CC -1- CAUTION: The sequence shown here is derived from an
CC EMBL/GenBank/DBJ whole genome shotgun (WGS) entry which is
CC preliminary data.
CC EMBL; CAE01010335; CAF93024.1; -; Genomic_DNA.
CC InterPro: IPR000276; GPCR_Rhodopsin.
DR

```

DR Pfam, PF00001; 7cm 1; 1.
 DR PRINTS; PR00237; GPCRHDOPSN.
 DR PROSITE; PS50262; G PROTEIN RECP F1.2; 1.
 KW G-protein coupled receptor; Receptor; Transducer; Transmembrane.
 FT NON_TER
 SQ SEQUENCE 328 AA; 3658 MW; 4BA0F6785EB01D4F CRC64;
 Query Match 67.5%; Score 1344; DB 2; Length 328;
 Best Local Similarity 68.7%; Pred. No. 7.5e-96;
 Matches 257; Conservative 31; Mismatches 38; Indels 48; Gaps 4;
 QY 2 ANTGEPEEVSGLSPSSA-SAYKVLVLGLIMCVSLAGNALISLVLKERALHKAPYF 60
 DB 1 ANGSEGPAGSAATPPASVSAHVKLLIGIICVSLVGLVSLVLRDRALHKAPYF 60
 QY 61 LLDLCIADGIRAVCEPFLVLRHSSWTFSSALCKIYAFMAVLFCEHAAPMLFCISVT 120
 DB 61 LLDLCIADGIRAVCEPFLVLRHSSWTFSSALCKIYAFMAVLFCEHAAPMLFCISVT 120
 QY 121 RYMAIAHHRFYAKRMTLMTCAAVICAMTSLVAMAPFPVDGTYKFIREDQCIFEHRY 180
 DB 121 RYMAIAHHRFYAKRMTLMTCAAVICAMTSLVAMAPFPVDGTYKFIREDQCIFEHRY 180
 QY 181 FRANDTLGFMLMLAVLMAATHAVYKLLFEYRHRMRKPKVQVNPVPAISQWTFHGPATQ 240
 DB 181 FRANDTLGFMLMLAVLMAATHAVYKLLFEYRHRMRKPKVQVNPVPAISQWTFHGPATQ 240
 QY 241 AAANWLAGRGGRMPPTLLGIRONGHAASRLIMGEVGEKOLGMMFAITLFLILLMS 300
 DB 196 AAANWLAGRGGRMPPTLLGIRONGHAASRLIMGEVGEKOLGMMFAITLFLILLMS 255
 QY 301 PTIVACYWRFVYKACAVPHRYLATAYMSPQAQVNPVPCPLNKLKKCLTTHAP-CWG 359
 DB 256 PTIVACYWRFVYKACAVPHRYLATAYMSPQAQVNPVPCPLNKLKKCLTTHAP-CWG 315
 QY 360 TCGAPAPREPYCYM 373
 DB 316 TRPHR-PQEPYRNM 328
 RESULT 10
 Q5U576 XENLA PRELIMINARY; PRT; 370 AA.
 AC Q5U576
 DT 01-FEB-2005 (TrEMBLrel. 29, Created)
 DT 01-FEB-2005 (TrEMBLrel. 29, Last sequence update)
 DE LOC495345; protein.
 GN Name=LOC495345;
 OS Xenopus laevis (African clawed frog).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Amphibia; Batrachia; Anura; Mesobatrachia; Pipidoidea; Pipidae;
 OC Xenopodinae; Xenopus; Xenopus.
 OC NCBI_TaxID=8355;
 RN [1]
 RP NUCLEOTIDE SEQUENCE.
 RC TISSUE=Eye.
 RX MEDLINE=2231132; PubMed=12454917; DOI=10.1002/adv.10174;
 RA Klein S.L., Straubeberg R.L., Wegner L., Pontius J., Clifton S.W.,
 RA Richardson P.;
 RT "Genetic and genomic tools for Xenopus research: The NIH Xenopus
 RT initiative";
 RL Dev. Dyn. 225:384-391 (2002).
 RN [2]
 RP NUCLEOTIDE SEQUENCE.
 RC TISSUE=Eye;
 RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
 RA Straubeberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
 RA Klausner R.D., Collins F.S., Wegner L., Schemmen C.M., Schuler G.D.,
 RA Albrecht S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
 RA Hopkins J.F., Jordan H., Moore T., Max S.I., Wang J., Heide F.,
 RA Diatchenko L., Marcovina K., Farmer A.A., Rubin G.M., Hong L.,
 RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Schietz T.E.,

RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
 RA Raha S.S., Loquellano N.A., Peters G.J., Ableson R.D., Mullaly S.J.,
 RA Bosak S.A., McGowan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
 RA Richards S., Morley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
 RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs S., Sanchez A.,
 RA Fahay U., Helton E., Kettelman M., Madan A., Rodighiero S., Bouffard G.G.,
 RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
 RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
 RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
 RA Butterfield Y.S.N., Krzywicki M.J., Skalska U., Smalls D.E.,
 RA Scherch A., Schein J.E., Jones S.J.M., Marra M.A.,
 RA "Generation and initial analysis of more than 15,000 full-length human
 RT and mouse cDNA sequences";
 RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
 RN [3]
 RP NUCLEOTIDE SEQUENCE.
 RC TISSUE=Eye.
 RA Klein S., Gerhard D.S.;
 RL Submitted (OCT-2004) to the EMBL/Genbank/DBJ databases.
 CC -1- SUBCELLULAR LOCATION: Integral membrane protein (By similarity).
 DR EMBL; BC084808; AA84808.1; -; mRNA.
 DR GO; GO:0016021; C:integral to membrane; IEA.
 DR GO; GO:0004872; F:receptor activity; IEA.
 DR GO; GO:0001584; F:rhodopsin-like receptor activity; IEA.
 DR GO; GO:0007186; P:G-protein coupled receptor protein signaling; IEA.
 DR GO; GO:0007165; P:signal transduction; IEA.
 DR InterPro: IPR000276; GPCR_Rhodopsn.
 DR Pfam; PF00001; 7cm 1; 1.
 DR PRINTS; PR00237; GPCRHDOPSN.
 DR PROSITE; PS50262; G PROTEIN RECP F1.2; 1.
 KW G-protein coupled receptor; Receptor; Transducer; Transmembrane.
 SQ SEQUENCE 370 AA; 41904 MW; 8A459AD950886FF3 CRC64;
 Query Match 64.8%; Score 1291.5; DB 2; Length 370;
 Best Local Similarity 62.4%; Pred. No. 9.7e-92;
 Matches 234; Conservative 58; Mismatches 76; Indels 7; Gaps 4;
 QY 1 MANTGEPEEVSGLSPSSA-SAYKVLVLGLIMCVSLAGNALISLVLKERALHKAPYF 60
 DB 1 MANDSHADNIIQNSP--LTFALKLTSLGPIIGSVGNLISLVLVDKTLHRAPYF 58
 QY 61 LLDLCIADGIRAVCEPFLVLRHSSWTFSSALCKIYAFMAVLFCEHAAPMLFCISVT 120
 DB 59 LLDLCIADGIRAVCEPFLVLRHSSWTFSSALCKIYAFMAVLFCEHAAPMLFCISVT 118
 QY 121 RYMAIAHHRFYAKRMTLMTCAAVICAMTSLVAMAPFPVDGTYKFIREDQCIFEHRY 180
 DB 119 RYMAIAHHRFYAKRMTLMTCAAVICAMTSLVAMAPFPVDGTYKFIREDQCIFEHRY 178
 QY 181 FRANDTLGFMLMLAVLMAATHAVYKLLFEYRHRMRKPKVQVNPVPAISQWTFHGPATQ 240
 DB 179 FRANDTLGFMLMLAVLMAATHAVYKLLFEYRHRMRKPKVQVNPVPAISQWTFHGPATQ 238
 QY 241 AAANWLAGRGGRMPPTLLGIRONGHAASRLIMGEVGEKOLGMMFAITLFLILLMS 299
 DB 239 AAANWLAGRGGRMPPTLLGIRONGHAASRLIMGEVGEKOLGMMFAITLFLILLMS 298
 QY 300 PTIVACYWRFVYKACAVPHRYLATAYMSPQAQVNPVPCPLNKLKKCLTTHAP-CWG 358
 DB 299 GPTIACVYRVFVYKACAVPHRYLATAYMSPQAQVNPVPCPLNKLKKCLTTHAP-CWG 357
 QY 359 GTGAPAPREPYCYM 373
 DB 358 --RKSLRPRPYCVI 370
 RESULT 11
 Q4RHK7 TERNG PRELIMINARY; PRT; 371 AA.
 ID Q4RHK7
 DT 13-SEP-2005 (TrEMBLrel. 31, Created)
 DT 13-SEP-2005 (TrEMBLrel. 31, Last sequence update)
 DT 13-SEP-2005 (TrEMBLrel. 31, Last annotation update)

DE Chromosome 19 SCAFI5045, whole genome shotgun sequence.
GN ORFNames=GSTENG00034295001;
OS Tetraodon nigroviridis (Green puffer).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes;
OC Tetraodontidae; Tetraodontidae; Tetraodon.
NCBI_TaxId=99883;
OX [1]
RN NUCLEOTIDE SEQUENCE.
RP Jallion O., Aury J.M., Brunet F., Petit J.L., Strange-Thomann N.,
RA Mauceli E., Bouneau L., Fischer C., Oqout-Costaz C., Bernot A.,
RA Nicoud S., Jaffe D., Fisher S., Lutfalla G., Dosat C., Segurens B.,
RA Paslija C., Salanoubat M., Levy M., Boudet N., Castellano S.,
RA Anthouard V., Jubin C., Castellio L., Poulin J., De Berardinis V.,
RA Blemont C., Skalli Z., Cattolico L., Poulain J., De Berardinis V.,
RA Crnaud C., Duprat S., Brottier P., Coutanceau J.P., Gouzy J.,
RA Parra G., Lardier G., Chapelle C., McKernan K.J., McGowan P., Bosak S.,
RA Kellis M., Wolff J.N., Guigo R., Zody M.C., Mesirov J.,
RA Lindblad-Toh K., Birren B., Nusbaum C., Kahn D., Robinson-Rechavi M.,
RA Laudat V., Schacher V., Quetier F., Saurin W., Scarpelli C.,
RA Winkler P., Lander E.S., Weissbach J., Roest Crolius H.;
RT "Genome duplication in the teleost fish Tetraodon nigroviridis reveals
RT the early vertebrate proto-karyotype";
RL Nature 431:946-957(2004).
[2]
RN NUCLEOTIDE SEQUENCE.
RG Genoscope, Whitehead Institute Centre for Genome Research;
CC Submitted (FEB-2004) to the EMBL/Genbank/DBJ databases.
-1- CAUTION: The sequence shown here is derived from an
CC EMBL/Genbank/DBJ whole genome shotgun (WGS) entry which is
CC preliminary data.
-1- SUBCELLULAR LOCATION: Integral membrane protein (By similarity).
EMBL: CA601015045; CAG12125.1; -, Genomic_DNA.
DR InterPro: IPR000276; GPCR_Rhodopsin.
DR Pfam: PF00001; 7tm.1; 1.
DR PRINTS: PR00237; GPCR_Rhodopsin.
DR PROSITE: PS50262; G-PROTEIN RECEPTOR F1.2; 1.
KM G-protein coupled receptor; Receptor; Transducer; Transmembrane.
SQ SEQUENCE 371 AA; 41990 MW; ACBSC7163B15B5 CRC64;

Query Match 64.8%; Score 1291.5; DB 2; Length 371;
Best Local Similarity 64.8%; Pred. No. 9.7e-92;
Matches 220; Conservative 54; Mismatches 66; Indels 5; Gaps 3;

QY 21 SAVKVLVGLIMCVSLAGNAISLVKERALHRAPYFLDLCADGRSAVCPFL 80
DB 20 TFFKLTSLGFIIGVGVGNLILSLVKKSLHRAPIYFLDLCDLSIRSAICPFV 79
QY 81 ASVRHSSMTFSALSCQIVAFMAVLFQFHAFLFCISVTRYVMAIHHRFYAKMTLWC 140
DB 80 TSVKNSAMTYSLTCTKVIAFLGVLSCFHAFMLFCVSVTRYIAIHHRYTQLFWIC 139
QY 141 AAVTCMAWTLISVMAAPVDFVGYTKFIREDDCIFEHRYFKANDTLGFMMLAVMAAT 200
DB 140 LAVTCMAWTLISVMAAPVDFVGYTKFIREDDCIFEHRYFKANDTLGFMMLAVMAAT 199
QY 201 HAVYGKLLPEYHRRCKKPPQWPAISQNTFHGPGATGQAANWTAGRGGMPTLIG 260
DB 200 QLVYLLKLIFFVHRRKKRPQVFPVAVSQNTFHGPGASGQAANWLAGRGGMPTLIG 259
QY 261 IRONGHAAS-RRLLGMDVKGKOLGRMFAVITLLFLLSPPIVACVMPFVAKACAVPH 319
DB 260 IRONSNAAGRRRLVLDDEFTEKRIISMFTYIMTFPFLMGPFLIVACTYRVFARGPVIG 319
QY 320 RYLATAVMSFAQAAVPIVCPFLINKDLKKCL-TTHAPCGTSGAPAPRPYCV 373
DB 320 GYLTAAVMSFAQAAVPIVCPFLINKDLKKCL-TTHAPCGTSGAPAPRPYCV 371
RESULT 12
GPR85 HUMAN
ID GPR85_HUMAN STANDARD; PRT; 370 AA.

AC P60893; Q9UHI6, Q9NPDI,
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 10-MAY-2005 (Rel. 47, Last annotation update)
DE Probable G-protein coupled receptor 85 (Super conserved receptor
DE expressed in brain 2).
GN Name=GPR85; Synonyms=SREB2;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Homnidae;
OC Homo.
NCBI_TaxId=9606;
OX [1]
RN NUCLEOTIDE SEQUENCE, AND TISSUE SPECIFICITY.
RP TISSUE=Brain;
RX MEDLINE=20435311; PubMed=10978537; DOI=10.1016/S0167-4781(00)00182-2;
RT "The brain-specific G-protein coupled receptor GPR85 with identical
RT protein sequence in man and mouse maps to human chromosome 7q31.";
RL Biochim. Biophys. Acta 1493:269-272(2000).
[2]
RN NUCLEOTIDE SEQUENCE, AND TISSUE SPECIFICITY.
RC TISSUE=Brain;
RX MEDLINE=20294682; PubMed=10833454; DOI=10.1006/dbrc.2000.2829;
RA Matsumoto M., Saito T., Takasaki J., Kamohata M., Sugimoto T.,
RA Kobayashi M., Tadokoro M., Matsumoto S., Ohishi T., Furutachi K.;
RT "An evolutionarily conserved G-protein coupled receptor family, SREB,
RT expressed in the central nervous system";
RL Biochem. Biophys. Res. Commun. 272:576-582(2000).
[3]
RN NUCLEOTIDE SEQUENCE.
RP Suwa M., Sato T., Okouchi I., Arita M., Futami K., Matsumoto S.,
RA Teusenti S., Aburatani H., Asai K., Akiyama Y.;
RT "Genome-wide discovery and analysis of human seven transmembrane helix
RT receptor genes";
RL Submitted (JUL-2001) to the EMBL/Genbank/DBJ databases.
[4]
RN NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
RP TISSUE=Amygdala;
RG The German cDNA consortium;
RL Submitted (MAR-2000) to the EMBL/Genbank/DBJ databases.
[5]
RN NUCLEOTIDE SEQUENCE [LARGE SCALE GENOMIC DNA].
RX MEDLINE=22737999; PubMed=12853948; DOI=10.1038/nature01792;
RA Hillier L.W., Fulton R.S., Fulton L.A., Graves T.A., Pepin K.H.,
RA Wagner-McPherson C., Layman D., Maas J., Jaeger S., Walker R.,
RA Wyllie K., Sekhon M., Becker M.C., O'Laughlin M.D., Schaller M.E.,
RA Fowell G.A., Delhanty K.D., Miner T.L., Nash W.E., Cordes M., Du H.,
RA Sun H., Edwards J., Bradshaw-Cordum H., Ali J., Andrews S., Isak A.,
RA Vandrunft A., Nguyen C., Du F., Lamar B., Courtney L., Kalicki J.,
RA Ozeraky P., Bielicki L., Scott K., Holmes A., Harkins R., Harris A.,
RA Strong C.M., Hou S., Tomlinson C., Dauphin-Kohlberg S.,
RA Kozlowski-Reilly A., Leonard S., Rohlfing T., Rock S.M.,
RA Tin-Wollam A.-M., Abdo A., Minx P., Maupin R., Strommatt C.,
RA Latreille P., Miller N., Johnson D., Murray J., Woessner J.P.,
RA Wendt M.C., Yang S.-P., Schultz B.R., Wallis J.W., Speth J.,
RA Bieri T.A., Nelson J.O., Berkowicz N., Wohldmann P.E., Cook L.L.,
RA Hickentoam M.T., Eldred J., Williams D., Bedell J.A., Mardis E.R.,
RA Clifton S.W., Chisoe S.L., Marra M.A., Raymond C., Haugen E.,
RA Gillett W., Zhou Y., James R., Phelps K., Isidoro S., Bub K.,
RA Simms E., Levy R., Clendenning J., Kaul R., Kent M.J., Furey T.S.,
RA Baertsch R.A., Brent M.R., Keibler E., Flicek P., Bork P., Suyama M.,
RA Bailey J.A., Portnoy M.E., Torrence D., Chinwalla A.T., Gish W.R.,
RA Bddy S.R., McPherson J.D., Olson M.V., Eichler E.B., Green E.D.,
RA Waterston R.H., Wilson R.K.;
RT "The DNA sequence of human chromosome 7.";
RL Nature 424:157-164(2003).
CC -1- FUNCTION: Orphan receptor.
CC -1- SUBCELLULAR LOCATION: Integral membrane protein (By similarity).
CC -1- TISSUE SPECIFICITY: Highly expressed in brain and testis. Lower
CC levels in small intestine, placenta and spleen. In brain regions,
CC detected in all regions tested, but somewhat lower levels in the
CC corpus callosum, medulla and spinal cord.

CC -1- SIMILARITY: Belongs to the G-protein coupled receptor 1 family.
CC This Swiss-Prot entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation
CC the European Bioinformatics Institute. There are no restrictions on its
CC use as long as its content is in no way modified and this statement is not
CC removed.
CC
CC EMBL: AF250237; AAF79956.1; -; mRNA.
CC EMBL: AB040800; BAA96646.1; -; mRNA.
CC EMBL: AB065688; BAC05911.1; -; Genomic_DNA.
CC EMBL: AL161949; CAB82307.1; -; mRNA.
CC EMBL: AC073456; AAC93365.1; -; Genomic_DNA.
CC PIR: T47131; T47131.
CC Ensemble: ENSG00000164604; Homo sapiens.
CC HGNC: HGNC:4536; GPR85.
CC H-InvDB: HIX0007011; -.
CC MIM: 605188; -.
CC InterPro: IPR000276; GPCR_Rhodopsin.
CC Pfam: PF00001; 7tm.1; 1.
CC PRINTS: PR00237; GPCR_HODOPSIN.
CC PROSITE: PS00237; G_PROTEIN_RECEP_F1_1; FALSE_NEG.
CC PROSITE: PS0262; G_PROTEIN_RECEP_F1_2; 1.
CC G-protein coupled receptor; Glycoprotein; Multigene family; Receptor;
CC Transducer; Transmembrane.
CC
CC FT TOPO_DOM 1 25 Extracellular (Potential).
CC FT TOPO_DOM 26 46 Extracellular (Potential).
CC FT TOPO_DOM 47 57 Cytoplasmic (Potential).
CC FT TRANSMEM 58 78 Transmembrane.
CC FT TOPO_DOM 79 96 Extracellular (Potential).
CC FT TRANSMEM 97 117 Transmembrane.
CC FT TOPO_DOM 118 137 Cytoplasmic (Potential).
CC FT TRANSMEM 138 158 Transmembrane.
CC FT TOPO_DOM 159 188 Extracellular (Potential).
CC FT TRANSMEM 189 209 Transmembrane.
CC FT TOPO_DOM 210 286 Cytoplasmic (Potential).
CC FT TRANSMEM 287 307 Transmembrane.
CC FT TOPO_DOM 308 314 Extracellular (Potential).
CC FT TRANSMEM 314 334 Transmembrane.
CC FT TOPO_DOM 335 370 Cytoplasmic (Potential).
CC FT CARBOHYD 3 N-linked (GlcNAc...) (Potential).
CC FT CARBOHYD 83 N-linked (GlcNAc...) (Potential).
CC FT CARBOHYD 182 N-linked (GlcNAc...) (Potential).
CC FT DISULFID 94 By similarity.
CC SQ SEQUENCE 370 AA; 41995 MW; 7867A39F616AAB CRC64;
Query Match 64.7%; Score 1288.5; DB 1; Length 370;
Best Local Similarity 62.7%; Pred. No. 1.7e-91;
Matches 235; Conservative 56; Mismatches 77; Indels 7; Gaps 4;
QY 1 MANTGEPPEVSGALSPSPASAVKVLGLTMCVSLAGNALISGLVTKERAIHKAPYF 60
DB 1 MANSYADANIIQNLSP--LTAFLKLTSLGFIIGSVVNLISILVNDKTLHRAPIYF 58
QY 61 LLDLCLADGIRSAVCPFLVLAIVRHGSSMTFSALSKIVAPMAVLFCEHAAPFLPCISVT 120
DB 59 LLDLCCSDILRSKATICPPFVNSKNGSTWYGLTKVIAFGVLSCEFTAFELFCISVT 118
QY 121 RMAIAAHRRFYAKRMTLMTCAAVTCAWMTLSVMAFPFVDVGYTFEEDQCFEHR 180
DB 119 RLALAHRRFYTKRLFWTCIAVICWMTLSVMAFPVLDVGTYSFIEEDQCFQHS 178
QY 181 FPAANDTLGMLMLAVIMAAVTHAVYGLLLFEYRHRKMKFVQNPVPAISONWTHFGPAGTQ 240
DB 179 FPAANSISGLFMLLALILATLTOVLVYLLTIFVHRRKMKFVQFAAASQWTFHGPASQ 238
QY 241 AAANNIAGRGGMPTTLGIRONGHAAS--RLIGDEKGEKQGRMYATITLFLILM 299
DB 239 AAANNIAGRGGRGTPPTLIGIRONATTTGRRRLVLDERMEKRSKMFYITLFLILM 298
QY 300 SSYIYACVRRVFKACAVHRYLATAVMNSFAQAAVNPVTCFLNLDKCL--THAPCW 358
DB 299 GYLVAACVRRVFKAVRGVVFGLTAAVMSFAQAGINPVCIFSNRELRCSTTLVLC- 357

QY 359 GTCGADAPREPYCVM 373
DB 358 --RKSLPREPYCVI 370
RESULT 13
GPR85 MOUSE STANDARD; PRT; 370 AA.
AC GPR85 MOUSE Q9NPD1;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 10-MAY-2005 (Rel. 47, Last annotation update)
DE Probable G-protein coupled receptor 85 (Super conserved receptor
DE expressed in brain 2).
GN Name=Gpr85; Synonyms=sreb2;
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
OC Muridae; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN (1)
RP NUCLEOTIDE SEQUENCE, AND TISSUE SPECIFICITY.
RC STRAIN=CD-1; TISSUE=Fetal brain;
RX MEDLINE=20435311; PubMed=10978537; DOI=10.1016/S0167-4781(00)00182-2;
RT Heliebrand S., Schaller H.C., Wittenberger T.;
RT "The brain-specific G-protein coupled receptor GPR85 with identical
RT protein sequence in man and mouse maps to human chromosome 7q31.";
RT Biochim. Biophys. Acta 1493:269-272 (2000).
[2]
NCBIOTIDE SEQUENCE (LARGE SCALE MRNA).
RP STRAIN=C57BL/6; TISSUE=Brain, and Eye;
RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Klausner R.D., Collins F.S., Wagner L., Shemen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buettow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Heich F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.U., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loggellano N.A., Peters G.J., Abramson R.D., Mullany S.J.,
RA Bosak S.A., McMan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Morley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Murry D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahy J., Helton E., Kettelman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green B.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.J., Skalska U., Smalhus D.B.,
RA Scherch A., Schein J.E., Jones S.J.M., Marra M.A.,
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
CC -1- FUNCTION: Orphan receptor.
CC -1- SUBCELLULAR LOCATION: Integral membrane protein (By similarity).
CC -1- TISSUE SPECIFICITY: Exclusively expressed in brain.
CC -1- SIMILARITY: Belongs to the G-protein coupled receptor 1 family.
CC This Swiss-Prot entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use as long as its content is in no way modified and this statement is not
CC removed.
CC
CC EMBL: AF254416; AAF79959.1; -; mRNA.
CC EMBL: BC026975; AAH26975.1; -; mRNA.
CC EMBL: BC065154; AAH65154.1; -; mRNA.
CC Ensemble: ENSMUSG00000048216; Mus musculus.
CC WGI: WGI:1927851; Gpr85.
GO: GO:0016021; C:integral to membrane; TAS.
DR InterPro: IPR000276; GPCR_Rhodopsin.
DR Pfam: PF00001; 7tm.1; 1.
DR PRINTS: PR00237; GPCR_HODOPSIN.

QY	12	RA	MAA	AHHEFYAKBMFLMTCAVIGCAAMTISVMAAPPVVDGTYKREEDOCIFPHRY	180
Db	119	RL	ALAHNRFFYKRLTFMTCLAVICVMWILSVMAAPPVLDVTYSFIREEDCTOHR	178	
QY	181	FR	ADTLGFMFLMVLAVMAATHAVYKLLDFEYRHRKKPKPVQVPAISQNTFHGPGATGQ	240	
QY	179	FR	ADSLGFMFLMFLATLILATQLVYLKIFPVHRRKKPKQVPAVAASQNTFHGPGASGQ	238	
QY	241	MA	ANVIAGRGGRMPFTLLGIRONGIAAS	299	
QY	239	MA	ANVLAGRGGRPTPTLLGIRONANTTGRRLRLVLVDFEYMERKIRSMFIMTFLETLW	298	
QY	300	SP	YIACVYRVFKACAVPHRYATATVMNSFAQAAVNPICFLPNLDLKKCL	358	
Db	299	GY	VLVACVRYRVFARGRVFEGFLTAAVMNSFAQAGINPFCISINELRCFSTTLLYC	357	
QY	359	GT	GAAPAPREPVCVM	373	
Db	358	RR	RLPREPYCVI	370	
RESULT 15					
ID	Q8NEN2	HUMAN	PRELIMINARY;	PRT; 370 AA.	
AC	Q8NEN2;				
DT	01-OCT-2002	(TREMBlrel. 22, Created)			
DT	01-OCT-2002	(TREMBlrel. 22, Last sequence update)			
DT	01-JUN-2003	(TREMBlrel. 24, Last annotation update)			
DE	G protein-coupled receptor 85.				
GN	Name=GPR85;				
OS	Homo sapiens (Human).				
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;				
OC	Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;				
OC	Homo.				
OX	NCBI_TaxID=9606;				
RN	(1)				
RP	NUCLEOTIDE SEQUENCE.				
RC	Tissue=Testis;				
RX	MEDLINE=22288957; PubMed=12477932; DOI=10.1073/pnas.242603899;				
RA	Strauberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,				
RA	Klausner R.D., Collins F.S., Wagner L., Shennan C.M., Schuler G.D.,				
RA	Alteschul S.F., Zeeberg B., Buecaw K.H., Schaefer C.F., Bhat N.K.,				
RA	Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,				
RA	Diachenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,				
RA	Stapleton M., Soares M.B., Bonaldo M.P., Casavant T.L., Scheetz T.E.,				
RA	Brownstein W.J., Usdin T.B., Tohilyuki S., Carninci P., Prange C.,				
RA	Rata S.S., Loguettano N.A., Peters G.J., Abramson R.D., Mullaly S.J.,				
RA	Boesk S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,				
RA	Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,				
RA	Villalón D.K., Muzny D.M., Sodegren E.J., Lu X., Gibbs R.A.,				
RA	Fahy J., Helton E., Kettelman M., Madan A., Rodrigues S., Sanchez A.,				
RA	Whiting M., Madan A.C., Young A.C., Green E.D., Dickson B.C.,				
RA	Blakesley R.W., Touchman J.W., Shen E.D., Dickson B.C.,				
RA	Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,				
RA	Rutledge J.V.S.N., Krzywinski M.I., Skalska U., Smallos D.E.,				
RA	Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;				
RT	"Generation and initial analysis of more than 15,000 full-length human				
RT	and mouse cDNA sequences";				
RL	Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).				
RN	(2)				
RP	NUCLEOTIDE SEQUENCE.				
RC	Tissue=Testis;				
RA	Strauberg R.;				
RL	Submitted (May-2002) to the EMBL/GenBank/DBJ databases.				
CC	-1- SUBCELLULAR LOCATION: Integral membrane protein (By similarity).				
DR	EMBL; BC030577; AAH30577.1; -; mRNA.				
DR	GO; GO:0016021; C:integral to membrane; IEA.				
DR	GO; GO:0004874; F:receptor activity; IEA.				
DR	GO; GO:0001584; F:rhodopsin-like receptor activity; IEA.				
DR	GO; GO:0007165; P-G-protein coupled receptor protein signaling. . .; IEA.				
DR	InterPro; IPR000276; GPCR_Rhodopsin				

DR Pfam; PF00001; 7tm 1; 1.
DR PRINTS; PR00237; GPCR_HOOPS.
DR PROSITE; PSS0262; G_PROTEIN_REC_P1_2; 1.
KW G-protein coupled receptor; Receptor; Transducer; Transmembrane
SQ SEQUENCE 370 AA; 41965 MW; 20DD032E716BC797 CRC64;

Query Match	64.7%	Score 1288.5;	DB 2;	Length 370;
Best Local Similarity	62.7%;	Pred. No. 1.7e-91;		
Matches 235; Conservative	56;	Mismatches 77;	Indels 7;	Gaps 4;

Qy	MAWTTGSPREVSQALSPSPASAVYVLVLGLIMCVSLAGNALISLVLKEBALHKAAYF	60
Db	1 MANYSHADNIIQNLSP--L7PAFLKJTSGLFISVSQNLILISLVKOKTLHRAYYF	58
Qy	LDDLCIADGIRSAVCEPFPVLASVRRGSSWTSALSCKI VAE MAYVLFCHEA FMLFCISVT	120
Db	59 LDDLCSDILRSALICPPFVSVNKSQSTWYOTGLICVKIAELGVLSCHEHAFMLFCISVT	118
Qy	121 RYALIAHHRFYAKRMTLMTCAAVICMAWTLISVAANA FPEYFVGVGYTKFIREDDCI FEHRY	180
Db	119 RYALIAHHRFYTRLLTFMTCLAVICMWTLSVAANA FPEVLVGVYSFIREDDQAFPHRS	178
Qy	181 FKANDLIGFMLMAVILMAATHAVYCKLLFEVHRKMKPVQMVPAISQNTFHPGSGATQ	240
Db	179 FRANDSLGFMLLALILALATQLVYKLIFEVHRKMKPVQFVAASQNTFHPGSGAQ	238
Qy	241 AANWTLAGFGRGHEPTLLIGIRONGHAAS-RLLQMDSEVKEKOLGIMFYAITLLFLLW	299
Db	239 AANWTLAGRGRTPTLLIGIRQNAWTTGRRLVLVDFEKMEKXISNRFYIMTLFLLW	298
Qy	300 SPYIYACVYRVKVCAPVHRYLATAVMMSFQAADVIVCFLLINKDKCL-TTHA PCW	358
Db	299 GPYIYACVYRVFARGVVGGLTAAVMMSFQAQINDFVCI FSNRELRRCFSTLLYC-	357
Qy	359 GTGGAAPRPEPYCM 373	
Db	358 --RKSRLPREPYCVI 370	

Search completed: March 7, 2006, 12:54:13
Job time : 235 secs

THIS PAGE BLANK (USPTO)

GenCore version 5.1.7
Copyright (c) 1993 - 2006 BioCeleration Ltd.

OM protein - protein search, using sw model

Run on: March 7, 2006, 12:54:30 ; Search time 46 Seconds
(without alignments)
670.392 Million cell updates/sec

Title: US-10-782-596-20

Perfect score: 1992

Sequence: 1 MANTGEPREVSAGALSPFSA.....HAPCMGTGAPAPRPPCYM 373

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database :

Issued Patents AA:*
1: /cgn2_6/prodata/1/1aa/5 COMB.pep:*
2: /cgn2_6/prodata/1/1aa/6 COMB.pep:*
3: /cgn2_6/prodata/1/1aa/H.COMB.pep:*
4: /cgn2_6/prodata/1/1aa/PC.TUS.COMB.pep:*
5: /cgn2_6/prodata/1/1aa/RE.COMB.pep:*
6: /cgn2_6/prodata/1/1aa/backfillsl.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1992	100.0	373	2	US-09-875-076-20 Sequence 20, App1
2	1986	99.7	373	2	US-09-622-439-6 Sequence 6, App1
3	1986	99.7	373	2	US-10-318-142-6 Sequence 6, App1
4	1975	99.1	373	2	US-09-622-439-26 Sequence 26, App1
5	1975	99.1	373	2	US-10-318-142-26 Sequence 26, App1
6	1288.5	64.7	370	2	US-09-251-373-2 Sequence 2, App1
7	1288.5	64.7	370	2	US-09-622-439-4 Sequence 4, App1
8	1288.5	64.7	370	2	US-09-622-439-24 Sequence 24, App1
9	1288.5	64.7	370	2	US-10-318-142-4 Sequence 4, App1
10	1288.5	64.7	370	2	US-10-318-142-24 Sequence 24, App1
11	1288.5	64.7	370	2	US-09-875-076-26 Sequence 26, App1
12	1031	51.8	375	2	US-09-622-439-2 Sequence 2, App1
13	1031	51.8	375	2	US-10-318-142-2 Sequence 2, App1
14	1031	51.8	375	2	US-09-875-076-16 Sequence 16, App1
15	1023	51.4	377	2	US-09-622-439-12 Sequence 12, App1
16	1023	51.4	377	2	US-10-318-142-22 Sequence 22, App1
17	994	49.9	184	2	US-09-369-247-62 Sequence 62, App1
18	994	49.9	184	2	US-10-062-548-62 Sequence 62, App1
19	342	17.2	123	2	US-09-369-247-104 Sequence 104, App
20	342	17.2	123	2	US-10-062-548-104 Sequence 104, App
21	268.5	13.5	471	2	US-09-032-742-17 Sequence 17, App1
22	264.5	13.3	471	2	US-09-032-742-11 Sequence 11, App1
23	263.5	13.2	471	2	US-09-032-742-14 Sequence 14, App1
24	262	13.1	471	2	US-09-170-496D-228 Sequence 228, App
25	261.5	13.1	470	2	US-09-292-071-25 Sequence 25, App1
26	261.5	13.1	470	2	US-09-292-069A-25 Sequence 25, App1
27	261.5	13.1	470	2	US-09-767-013-25 Sequence 25, App1

28	261.5	13.1	470	2	US-09-292-072-25 Sequence 25, App1
29	261.5	13.1	470	2	US-10-176-255-25 Sequence 25, App1
30	260	13.1	400	2	US-09-826-509-491 Sequence 491, App
31	259.5	13.0	471	1	US-07-996-772A-11 Sequence 11, App1
32	259.5	13.0	471	2	US-09-032-742-2 Sequence 2, App1
33	259.5	13.0	471	2	US-09-145-864-4 Sequence 4, App1
34	259	13.0	478	2	US-09-292-071-33 Sequence 33, App1
35	259	13.0	478	2	US-09-292-069A-33 Sequence 33, App1
36	259	13.0	478	2	US-09-767-013-33 Sequence 33, App1
37	259	13.0	478	2	US-09-292-072-31 Sequence 31, App1
38	259	13.0	478	2	US-10-176-255-33 Sequence 33, App1
39	258	13.0	478	2	US-09-292-071-31 Sequence 31, App1
40	258	13.0	478	2	US-09-292-069A-31 Sequence 31, App1
41	258	13.0	478	2	US-09-767-013-31 Sequence 31, App1
42	258	13.0	478	2	US-09-292-072-31 Sequence 31, App1
43	258	13.0	478	1	US-10-176-255-31 Sequence 31, App1
44	257	12.9	471	1	US-07-817-920-8 Sequence 8, App1
45	257	12.9	471	1	US-08-370-542-7 Sequence 7, App1

ALIGNMENTS

RESULT 1
US-09-875-076-20
; Sequence 20, Application US/09875076
; Patent No. 6869776
; GENERAL INFORMATION:
; APPLICANT: Chen, Kuoping
; APPLICANT: Dang, Huang T.
; APPLICANT: Liaw, Chen W.
; APPLICANT: Lin, I-Lin
; TITLE OF INVENTION: Human Orphan G Protein Coupled Receptors
; FILE REFERENCE: ARENO050
; CURRENT APPLICATION NUMBER: US/09/875, 076
; CURRENT FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: 09/417, 044
; PRIOR FILING DATE: 1999-10-12
; PRIOR APPLICATION NUMBER: 60/120, 416
; PRIOR FILING DATE: 1999-02-16
; PRIOR APPLICATION NUMBER: 60/121, 851
; PRIOR FILING DATE: 1999-02-26
; PRIOR APPLICATION NUMBER: 60/123, 946
; PRIOR FILING DATE: 1999-03-12
; PRIOR APPLICATION NUMBER: 60/123, 949
; PRIOR FILING DATE: 1999-03-12
; PRIOR APPLICATION NUMBER: 60/136, 436
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/136, 437
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/136, 439
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/136, 567
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/137, 127
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/137, 131
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/141, 448
; PRIOR FILING DATE: 1999-06-29
; PRIOR APPLICATION NUMBER: 60/156, 553
; PRIOR FILING DATE: 1999-09-29
; PRIOR APPLICATION NUMBER: 60/156, 633
; PRIOR FILING DATE: 1999-09-29
; PRIOR APPLICATION NUMBER: 60/156, 555
; PRIOR FILING DATE: 1999-09-29
; PRIOR APPLICATION NUMBER: 60/156, 634
; PRIOR FILING DATE: 1999-09-29
; PRIOR APPLICATION NUMBER: 60/157, 280
; PRIOR FILING DATE: 1999-10-01
; PRIOR APPLICATION NUMBER: 60/157, 294
; PRIOR FILING DATE: 1999-10-01
; PRIOR APPLICATION NUMBER: 60/157, 281

;; PRIOR FILING DATE: 1999-10-01
;; PRIOR APPLICATION NUMBER: 60/157,293
;; PRIOR FILING DATE: 1999-10-01
;; PRIOR APPLICATION NUMBER: 60/157,282
;; PRIOR FILING DATE: 1999-10-01
;; NUMBER OF SEQ ID NOS: 74
;; SOFTWARE: Patentin Ver. 2.1
;; SEQ ID NO 20
;; LENGTH: 373
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-09-875-076-20

Query Match 100.0%; Score 1992; DB 2; Length 373;
Best Local Similarity 100.0%; Pred. No. 8,9e-171;
Matches 373; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MANTTGEPEVSGALSPSPASAVYKLVLLGLIMCVSLAGNALISLVLKERALHKAAPYF 60
DB 1 MANTTGEPEVSGALSPSPASAVYKLVLLGLIMCVSLAGNALISLVLKERALHKAAPYF 60
QY 61 LLDLCLADGIRSAVCFPPVLASVRHGSSWTFSSALCKIYAFMAVLFCEHAAFMFLFCISVT 120
DB 61 LLDLCLADGIRSAVCFPPVLASVRHGSSWTFSSALCKIYAFMAVLFCEHAAFMFLFCISVT 120
QY 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLISVMAFPVPVDTGYTFIREEDOCIFEHRY 180
DB 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLISVMAFPVPVDTGYTFIREEDOCIFEHRY 180
QY 181 FRANDTLGFMLMLAVLMAATHAVYVKLLLFYRHRKMKPVQVMPAISQWTFHGPATGQ 240
DB 181 FRANDTLGFMLMLAVLMAATHAVYVKLLLFYRHRKMKPVQVMPAISQWTFHGPATGQ 240
QY 241 AAANWTAGRGMPPTLLGIRONGHAASRRLGMDVKGKQDGMFPAITLLFLLMS 300
DB 241 AAANWTAGRGMPPTLLGIRONGHAASRRLGMDVKGKQDGMFPAITLLFLLMS 300
QY 301 PYIVACYWRFVYKACAVPHRYLATAVMSPQAQAVNPVYCFLLNKKLCTTHAPCWGT 360
DB 301 PYIVACYWRFVYKACAVPHRYLATAVMSPQAQAVNPVYCFLLNKKLCTTHAPCWGT 360
QY 361 GGAPAPREPYCYW 373
DB 361 GGAPAPREPYCYW 373

RESULT 2
US-09-622-439-6
;; Sequence 6, Application US/09622439
;; Patent No. 6555344
;; GENERAL INFORMATION:
;; APPLICANT: Yamahouchi Pharmaceutical Co., Ltd.
;; TITLE OF INVENTION: A novel G protein coupled receptor protein
;; FILE REFERENCE: Y9905
;; CURRENT APPLICATION NUMBER: US/09/622,439
;; CURRENT FILING DATE: 2000-08-17
;; PRIOR APPLICATION NUMBER: JP P1998-060245
;; PRIOR FILING DATE: 1998-03-12
;; PRIOR APPLICATION NUMBER: JP P1999-026774
;; PRIOR FILING DATE: 1999-02-03
;; NUMBER OF SEQ ID NOS: 26
;; SOFTWARE: Patentin Ver. 2.0
;; SEQ ID NO 6
;; LENGTH: 373
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-09-622-439-6

Query Match 99.7%; Score 1986; DB 2; Length 373;
Best Local Similarity 99.7%; Pred. No. 3.1e-170;
Matches 372; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MANTTGEPEVSGALSPSPASAVYKLVLLGLIMCVSLAGNALISLVLKERALHKAAPYF 60

DB 1 MANTTGEPEVSGALSPSPASAVYKLVLLGLIMCVSLAGNALISLVLKERALHKAAPYF 60
QY 61 LLDLCLADGIRSAVCFPPVLASVRHGSSWTFSSALCKIYAFMAVLFCEHAAFMFLFCISVT 120
DB 61 LLDLCLADGIRSAVCFPPVLASVRHGSSWTFSSALCKIYAFMAVLFCEHAAFMFLFCISVT 120
QY 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLISVMAFPVPVDTGYTFIREEDOCIFEHRY 180
DB 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLISVMAFPVPVDTGYTFIREEDOCIFEHRY 180
QY 181 FRANDTLGFMLMLAVLMAATHAVYVKLLLFYRHRKMKPVQVMPAISQWTFHGPATGQ 240
DB 181 FRANDTLGFMLMLAVLMAATHAVYVKLLLFYRHRKMKPVQVMPAISQWTFHGPATGQ 240
QY 241 AAANWTAGRGMPPTLLGIRONGHAASRRLGMDVKGKQDGMFPAITLLFLLMS 300
DB 241 AAANWTAGRGMPPTLLGIRONGHAASRRLGMDVKGKQDGMFPAITLLFLLMS 300
QY 301 PYIVACYWRFVYKACAVPHRYLATAVMSPQAQAVNPVYCFLLNKKLCTTHAPCWGT 360
DB 301 PYIVACYWRFVYKACAVPHRYLATAVMSPQAQAVNPVYCFLLNKKLCTTHAPCWGT 360
QY 361 GGAPAPREPYCYW 373
DB 361 GGAPAPREPYCYW 373

RESULT 3
US-10-318-142-6
;; Sequence 6, Application US/10318142
;; Patent No. 6808899
;; GENERAL INFORMATION:
;; APPLICANT: Yamahouchi Pharmaceutical Co., Ltd.
;; TITLE OF INVENTION: A novel G protein coupled receptor protein
;; FILE REFERENCE: Y9905
;; CURRENT APPLICATION NUMBER: US/10/318,142
;; CURRENT FILING DATE: 2002-12-13
;; PRIOR APPLICATION NUMBER: US/09/622,439
;; PRIOR FILING DATE: 2000-08-17
;; PRIOR APPLICATION NUMBER: JP P1998-060245
;; PRIOR FILING DATE: 1998-03-12
;; PRIOR APPLICATION NUMBER: JP P1999-026774
;; PRIOR FILING DATE: 1999-02-03
;; NUMBER OF SEQ ID NOS: 26
;; SOFTWARE: Patentin Ver. 2.0
;; SEQ ID NO 6
;; LENGTH: 373
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-10-318-142-6

Query Match 99.7%; Score 1986; DB 2; Length 373;
Best Local Similarity 99.7%; Pred. No. 3.1e-170;
Matches 372; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MANTTGEPEVSGALSPSPASAVYKLVLLGLIMCVSLAGNALISLVLKERALHKAAPYF 60
DB 1 MANTTGEPEVSGALSPSPASAVYKLVLLGLIMCVSLAGNALISLVLKERALHKAAPYF 60
QY 61 LLDLCLADGIRSAVCFPPVLASVRHGSSWTFSSALCKIYAFMAVLFCEHAAFMFLFCISVT 120
DB 61 LLDLCLADGIRSAVCFPPVLASVRHGSSWTFSSALCKIYAFMAVLFCEHAAFMFLFCISVT 120
QY 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLISVMAFPVPVDTGYTFIREEDOCIFEHRY 180
DB 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLISVMAFPVPVDTGYTFIREEDOCIFEHRY 180
QY 181 FRANDTLGFMLMLAVLMAATHAVYVKLLLFYRHRKMKPVQVMPAISQWTFHGPATGQ 240
DB 181 FRANDTLGFMLMLAVLMAATHAVYVKLLLFYRHRKMKPVQVMPAISQWTFHGPATGQ 240
QY 241 AAANWTAGRGMPPTLLGIRONGHAASRRLGMDVKGKQDGMFPAITLLFLLMS 300

Db 241 AAANWTAGFGRGMPPTLLGIRONGHAASRLGMDVEKGEKOLGRMFAITLLPILLMS 300
Qy 301 PYIVACYMRFVYKACAVPHRYLATAVWMSFAQAAVNPVYCFLLNKDLKKCLTTHACWGT 360
Db 301 PYIVACYMRFVYKACAVPHRYLATAVWMSFAQAAVNPVYCFLLNKDLKKCLTTHACWGT 360
Qy 361 GGAPAREPYCVM 373
Db 361 GGAPAREPYCVM 373

RESULT 4
US-09-622-439-26
; Sequence 26, Application US/09622439
; Patent No. 6555344
; GENERAL INFORMATION:
; APPLICANT: Yamamouchi Pharmaceutical Co., Ltd.
; TITLE OF INVENTION: A novel G protein coupled receptor protein
; FILE REFERENCE: Y9905
; CURRENT APPLICATION NUMBER: US/09/622,439
; PRIOR FILING DATE: 2000-08-17
; PRIOR APPLICATION NUMBER: JP P1998-060245
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: JP P1999-026774
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 26
; LENGTH: 373
; TYPE: PRT
; ORGANISM: Rat coronavirus
US-09-622-439-26

Query Match 99.1%; Score 1975; DB 2; Length 373;
Best Local Similarity 99.2%; Pred. No. 3e-169;
Matches 370; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 MANTGEPREVSGLSPSASAYVKVLGLIMCVSLAGNALISLVLKERALHKAPYYF 60
Db 1 MANTGEPREVSGLSPSASAYVKVLGLIMCVSLAGNALISLVLKERALHKAPYYF 60
Qy 61 LLDLCIADGIRSAVCPFPYLAIVRHGSSWTFSSALCKIYAFMAVLCFHAFFMLFCISVT 120
Db 61 LLDLCIADGIRSAVCPFPYLAIVRHGSSWTFSSALCKIYAFMAVLCFHAFFMLFCISVT 120
Qy 121 RYMAIAHRRFYAKRMTLMTCAAVICMAWTLISVMAAPVPVGVGYKFIREDQCFEHR 180
Db 121 RYMAIAHRRFYAKRMTLMTCAAVICMAWTLISVMAAPVPVGVGYKFIREDQCFEHR 180
Qy 181 FRANDTLGFMMLAVMAATHAVYKLLPEYRHRKKRPQWPAISQWTFHGPATQ 240
Db 181 FRANDTLGFMMLAVMAATHAVYKLLPEYRHRKKRPQWPAISQWTFHGPATQ 240
Qy 241 AAANWTAGFGRGMPPTLLGIRONGHAASRLGMDVEKGEKOLGRMFAITLLPILLMS 300
Db 241 AAANWTAGFGRGMPPTLLGIRONGHAASRLGMDVEKGEKOLGRMFAITLLPILLMS 300
Qy 301 PYIVACYMRFVYKACAVPHRYLATAVWMSFAQAAVNPVYCFLLNKDLKKCLTTHACWGT 360
Db 301 PYIVACYMRFVYKACAVPHRYLATAVWMSFAQAAVNPVYCFLLNKDLKKCLTTHACWGT 360
Qy 361 GGAPAREPYCVM 373
Db 361 GGAPAREPYCVM 373

RESULT 5
US-10-318-142-26
; Sequence 26, Application US/10318142
; Patent No. 6808899
; GENERAL INFORMATION:
; APPLICANT: Yamamouchi Pharmaceutical Co., Ltd.

; TITLE OF INVENTION: A novel G protein coupled receptor protein
; FILE REFERENCE: Y9905
; CURRENT APPLICATION NUMBER: US/10/318,142
; PRIOR FILING DATE: 2002-12-13
; PRIOR APPLICATION NUMBER: US/09/622,439
; PRIOR FILING DATE: 2000-08-17
; PRIOR APPLICATION NUMBER: JP P1998-060245
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: JP P1999-026774
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 26
; LENGTH: 373
; TYPE: PRT
; ORGANISM: Rat coronavirus
US-10-318-142-26

Query Match 99.1%; Score 1975; DB 2; Length 373;
Best Local Similarity 99.2%; Pred. No. 3e-169;
Matches 370; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 MANTGEPREVSGLSPSASAYVKVLGLIMCVSLAGNALISLVLKERALHKAPYYF 60
Db 1 MANTGEPREVSGLSPSASAYVKVLGLIMCVSLAGNALISLVLKERALHKAPYYF 60
Qy 61 LLDLCIADGIRSAVCPFPYLAIVRHGSSWTFSSALCKIYAFMAVLCFHAFFMLFCISVT 120
Db 61 LLDLCIADGIRSAVCPFPYLAIVRHGSSWTFSSALCKIYAFMAVLCFHAFFMLFCISVT 120
Qy 121 RYMAIAHRRFYAKRMTLMTCAAVICMAWTLISVMAAPVPVGVGYKFIREDQCFEHR 180
Db 121 RYMAIAHRRFYAKRMTLMTCAAVICMAWTLISVMAAPVPVGVGYKFIREDQCFEHR 180
Qy 181 FRANDTLGFMMLAVMAATHAVYKLLPEYRHRKKRPQWPAISQWTFHGPATQ 240
Db 181 FRANDTLGFMMLAVMAATHAVYKLLPEYRHRKKRPQWPAISQWTFHGPATQ 240
Qy 241 AAANWTAGFGRGMPPTLLGIRONGHAASRLGMDVEKGEKOLGRMFAITLLPILLMS 300
Db 241 AAANWTAGFGRGMPPTLLGIRONGHAASRLGMDVEKGEKOLGRMFAITLLPILLMS 300
Qy 301 PYIVACYMRFVYKACAVPHRYLATAVWMSFAQAAVNPVYCFLLNKDLKKCLTTHACWGT 360
Db 301 PYIVACYMRFVYKACAVPHRYLATAVWMSFAQAAVNPVYCFLLNKDLKKCLTTHACWGT 360
Qy 361 GGAPAREPYCVM 373
Db 361 GGAPAREPYCVM 373

RESULT 6
US-09-251-373-2
; Sequence 2, Application US/09251373
; Patent No. 6071722
; GENERAL INFORMATION:
; APPLICANT: SHABON, USMAN
; APPLICANT: ELSHOUBAGY, NABIL
; TITLE OF INVENTION: A G-PROTEIN COUPLED 7TM RECEPTOR
; NUMBER OF SEQUENCES: 2
; CORRESPONDENCE ADDRESSES:
; ADDRESSER: Ratner & Precia
; STREET: P.O. Box 980
; CITY: Valley Forge
; STATE: PA
; COUNTRY: USA
; ZIP: 19482
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS

```
/ SOFTWARE: FASTSEQ for Windows Version 2.0
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/09/251,373
/ FILING DATE: 16-FEB-1999
/ CLASSIFICATION:
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: 60/082,981
/ FILING DATE: 24-APR-1998
/ APPLICATION NUMBER: 60/089,639
/ FILING DATE: 17-JUN-1998
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Prestia, Paul F
/ REGISTRATION NUMBER: 23,031
/ REFERENCE/DOCKET NUMBER: GP-70432
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 610-407-0700
/ TELEFAX: 610-407-0700
/ TELEX: 846169
/ INFORMATION FOR SEQ ID NO: 2:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 370 amino acids
/ TYPE: amino acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ US-09-251-373-2
```

Query Match 64.7%; Score 1288.5; DB 2; Length 370;

Best Local Similarity 62.7%; Pred. No. 1.2e-107; Matches 235; Conservative 56; Mismatches 77; Indels 7; Gaps 4;

```
1 MANTGEPREVSGLSPSPASAVKLVLLGLIMCVSLAGNALISLVLKERALHKAAPYF 60
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
1 MANYSHADNLIQNLSP--LTAFLKLTSLGFIGSVGNLLISLLVNDKTLHRAAPYF 58
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
61 LLDLCLADGIRSAVCPFPVLASVRRGSSWTFSAISCKIVAFMAVLFCEFAEMLCISVT 120
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
59 LLDLCCSDILRSALCFPFVNSVKGSTWTGTLCKVIAFLGVLSCFHTAFMLFCISVT 118
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
121 RYMAIAHHRFYAKRMTLWTCALVICMAWTLVSMAAPPPVFDVGTYSFIREDOCTFEHRY 180
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
119 RYLAIAHHRFYKRLTFWTCCLAVICMWTLSVMAAPPPVLDVGTYSFIREDOCTFOHRS 178
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
181 FRANDTLGFMMLAVLMAATTAHVYKLLIFBYRHRKMKPVQWVPALISQWTFHGGATGQ 240
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
179 FRANDSLGFMMLALILATQLVYLKLIFFVDRRKKRPVQFAAASQWTFHGGATGQ 238
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
241 AAANWLAGRGPMPTLLGIRONGHAAS--RLLGMDVYKSKOLGRMFYATLLFLILM 299
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
239 AAANWLAGRGPMPTLLGIRONGHAAS--RLLGMDVYKSKOLGRMFYATLLFLILM 298
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
300 SPYIVACYRVFVKACAVPHRYLATAVWMSFAQAAVNPVCFLLNDKLCCL--TTHAPCW 358
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
299 GPYLIVACYRVFARGPVDPGFLTAAVWMSFAQAGINPVCLFSRRELRCSTLLLYC- 357
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
359 GTGAPAPREPYCVM 373
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
358 --RKSRLLPREPYCVI 370
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
```

RESULT 7
US-09-622-439-4
Sequence 4, Application US/09622439

```
/ Patent No. 655344
/ GENERAL INFORMATION:
/ APPLICANT: Yamanouchi Pharmaceutical Co., Ltd.
/ TITLE OF INVENTION: A novel G protein coupled receptor protein
/ FILE REFERENCE: Y9905
/ CURRENT APPLICATION NUMBER: US/09/622,439
/ CURRENT FILING DATE: 2000-08-17
/ PRIOR APPLICATION NUMBER: JP P1998-060245
/ PRIOR FILING DATE: 1998-03-12
/ PRIOR APPLICATION NUMBER: JP P1999-026774
```

```
/ PRIOR FILING DATE: 1999-02-03
/ NUMBER OF SEQ ID NOS: 26
/ SOFTWARE: Patent Ver. 2.0
/ SEQ ID NO 4
/ LENGTH: 370
/ TYPE: PRT
/ ORGANISM: Homo sapiens
/ US-09-622-439-4
```

Query Match 64.7%; Score 1288.5; DB 2; Length 370;

Best Local Similarity 62.7%; Pred. No. 1.2e-107; Matches 235; Conservative 56; Mismatches 77; Indels 7; Gaps 4;

```
1 MANTGEPREVSGLSPSPASAVKLVLLGLIMCVSLAGNALISLVLKERALHKAAPYF 60
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
1 MANYSHADNLIQNLSP--LTAFLKLTSLGFIGSVGNLLISLLVNDKTLHRAAPYF 58
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
61 LLDLCLADGIRSAVCPFPVLASVRRGSSWTFSAISCKIVAFMAVLFCEFAEMLCISVT 120
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
59 LLDLCCSDILRSALCFPFVNSVKGSTWTGTLCKVIAFLGVLSCFHTAFMLFCISVT 118
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
121 RYMAIAHHRFYAKRMTLWTCALVICMAWTLVSMAAPPPVFDVGTYSFIREDOCTFEHRY 180
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
119 RYLAIAHHRFYKRLTFWTCCLAVICMWTLSVMAAPPPVLDVGTYSFIREDOCTFOHRS 178
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
181 FRANDTLGFMMLAVLMAATTAHVYKLLIFBYRHRKMKPVQWVPALISQWTFHGGATGQ 240
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
179 FRANDSLGFMMLALILATQLVYLKLIFFVDRRKKRPVQFAAASQWTFHGGATGQ 238
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
241 AAANWLAGRGPMPTLLGIRONGHAAS--RLLGMDVYKSKOLGRMFYATLLFLILM 299
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
239 AAANWLAGRGPMPTLLGIRONGHAAS--RLLGMDVYKSKOLGRMFYATLLFLILM 298
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
300 SPYIVACYRVFVKACAVPHRYLATAVWMSFAQAAVNPVCFLLNDKLCCL--TTHAPCW 358
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
299 GPYLIVACYRVFARGPVDPGFLTAAVWMSFAQAGINPVCLFSRRELRCSTLLLYC- 357
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
359 GTGAPAPREPYCVM 373
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
358 --RKSRLLPREPYCVI 370
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
```

RESULT 8
US-09-622-439-24
Sequence 24, Application US/09622439

```
/ Patent No. 655344
/ GENERAL INFORMATION:
/ APPLICANT: Yamanouchi Pharmaceutical Co., Ltd.
/ TITLE OF INVENTION: A novel G protein coupled receptor protein
/ FILE REFERENCE: Y9905
/ CURRENT APPLICATION NUMBER: US/09/622,439
/ CURRENT FILING DATE: 2000-08-17
/ PRIOR APPLICATION NUMBER: JP P1998-060245
/ PRIOR FILING DATE: 1998-03-12
/ PRIOR APPLICATION NUMBER: JP P1999-026774
/ NUMBER OF SEQ ID NOS: 26
/ SOFTWARE: Patent Ver. 2.0
/ SEQ ID NO 24
/ LENGTH: 370
/ TYPE: PRT
/ ORGANISM: Rattus sp.
/ US-09-622-439-24
```

Query Match 64.7%; Score 1288.5; DB 2; Length 370;

Best Local Similarity 62.7%; Pred. No. 1.2e-107; Matches 235; Conservative 56; Mismatches 77; Indels 7; Gaps 4;

```
1 MANTGEPREVSGLSPSPASAVKLVLLGLIMCVSLAGNALISLVLKERALHKAAPYF 60
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
1 MANYSHADNLIQNLSP--LTAFLKLTSLGFIGSVGNLLISLLVNDKTLHRAAPYF 58
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
61 LLDLCLADGIRSAVCPFPVLASVRRGSSWTFSAISCKIVAFMAVLFCEFAEMLCISVT 120
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
```

Db 59 LLDLCCSDILRSALICPPFVNSVXNGSTWTYGLTCKVIAFLGVLSCFHTAFMLFCISVT 118
121 RYMAIAHHRFYAKRMFLMTCAAVICMAWTLVSAMAPPPVDVGTGYFIREEDOCIEHRY 180
119 RYLAIAHHRFYTKRLTFWTCLAVICWMTLSVMAAPPPVLDVGTYSFIREEDOCIEHRS 178
181 PRANDTLGFMLMLAVMAATHAVYKLLFEYRHRMKKPVQWPAISQWTFHGPATGQ 240
179 PRANDSLGFMILLALILATQVLYLKLIFVHRRMKKPVQFAAVSQWTFHGPASQ 238
241 AAANWLAGFGGPMPTLLGIRONGHAAS-RLLGMDVYKGEKQGRMFYATLFLFLM 299
239 AAANWLAGFGGPTPTLLGIRONANTTGRRLVLDDEFKMERISRMFYIMTFLFLTM 298
300 SPYIACVYRVFVKACAVPHRYLATAVMMSFAQAAVNPVCFILNDLKKCL-TTHAPCW 358
299 GPVLVACVYRVFARGVPGGFLTAAVMMSFAQAGINPVCFISNRELRCFSTLLYC- 357
359 GTGGAAPAREPYCVM 373
358 --RKSLPREPYCVI 370

RESULT 9

US-10-318-142-4
Sequence 4, Application US/10318142
Patent No. 6808899
GENERAL INFORMATION:
APPLICANT: Yamamouchi Pharmaceutical Co., Ltd.
TITLE OF INVENTION: A novel G protein coupled receptor protein
FILE REFERENCE: Y9905
CURRENT APPLICATION NUMBER: US/10/318,142
CURRENT FILING DATE: 2002-12-13
PRIOR APPLICATION NUMBER: US/09/622,439
PRIOR FILING DATE: 2000-08-17
PRIOR APPLICATION NUMBER: JP P1998-060245
PRIOR FILING DATE: 1998-03-12
PRIOR APPLICATION NUMBER: JP P1999-026774
PRIOR FILING DATE: 1999-02-03
NUMBER OF SEQ ID NOS: 26
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 4
LENGTH: 370
TYPE: PRT
ORGANISM: Homo sapiens
US-10-318-142-4

Query Match 64.7%; Score 1288.5; DB 2; Length 370;

Best Local Similarity 62.7%; Pred. No. 1.2e-107;
Matches 235; Conservative 56; Mismatches 77; Indels 7; Gaps 4;

QY 1 MANTGPEPEVSGALSPPSASAVYKLVLLGLIMCVSLAGNALISLLVLERALHAKPYF 60
Db 1 MANYSHADNIIQNISP--LTAFLKLTSLGFIIGVGVNGLISILLVXDKTLHRAPIYF 58
QY 61 LLDLCLADGIRSAVCCPPFLASVRHGSSTFSAISCKIYAFNAVLFCEFAAFMLFCISVT 120
Db 59 LLDLCCSDILRSALICPPFVNSVXNGSTWTYGLTCKVIAFLGVLSCFHTAFMLFCISVT 118
QY 121 RYMAIAHHRFYAKRMFLMTCAAVICMAWTLVSAMAPPPVDVGTGYFIREEDOCIEHRY 180
Db 119 RYLAIAHHRFYTKRLTFWTCLAVICWMTLSVMAAPPPVLDVGTYSFIREEDOCIEHRS 178
QY 181 PRANDTLGFMLMLAVMAATHAVYKLLFEYRHRMKKPVQWPAISQWTFHGPATGQ 240
Db 179 PRANDSLGFMILLALILATQVLYLKLIFVHRRMKKPVQFAAVSQWTFHGPASQ 238
QY 241 AAANWLAGFGGPMPTLLGIRONGHAAS-RLLGMDVYKGEKQGRMFYATLFLFLM 299
Db 239 AAANWLAGFGGPTPTLLGIRONANTTGRRLVLDDEFKMERISRMFYIMTFLFLTM 298
QY 300 SPYIACVYRVFVKACAVPHRYLATAVMMSFAQAAVNPVCFILNDLKKCL-TTHAPCW 358

Db 299 GPVLVACVYRVFARGVPGGFLTAAVMMSFAQAGINPVCFISNRELRCFSTLLYC- 357
QY 359 GTGGAAPAREPYCVM 373
Db 358 --RKSLPREPYCVI 370

RESULT 10

US-10-318-142-24
Sequence 24, Application US/10318142
Patent No. 6808899
GENERAL INFORMATION:
APPLICANT: Yamamouchi Pharmaceutical Co., Ltd.
TITLE OF INVENTION: A novel G protein coupled receptor protein
FILE REFERENCE: Y9905
CURRENT APPLICATION NUMBER: US/10/318,142
CURRENT FILING DATE: 2002-12-13
PRIOR APPLICATION NUMBER: US/09/622,439
PRIOR FILING DATE: 2000-08-17
PRIOR APPLICATION NUMBER: JP P1998-060245
PRIOR FILING DATE: 1998-03-12
PRIOR APPLICATION NUMBER: JP P1999-026774
NUMBER OF SEQ ID NOS: 26
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 24
LENGTH: 370
TYPE: PRT
ORGANISM: Rattus sp.
US-10-318-142-24

Query Match 64.7%; Score 1288.5; DB 2; Length 370;

Best Local Similarity 62.7%; Pred. No. 1.2e-107;
Matches 235; Conservative 56; Mismatches 77; Indels 7; Gaps 4;

QY 1 MANTGPEPEVSGALSPPSASAVYKLVLLGLIMCVSLAGNALISLLVLERALHAKPYF 60
Db 1 MANYSHADNIIQNISP--LTAFLKLTSLGFIIGVGVNGLISILLVXDKTLHRAPIYF 58
QY 61 LLDLCLADGIRSAVCCPPFLASVRHGSSTFSAISCKIYAFNAVLFCEFAAFMLFCISVT 120
Db 59 LLDLCCSDILRSALICPPFVNSVXNGSTWTYGLTCKVIAFLGVLSCFHTAFMLFCISVT 118
QY 121 RYMAIAHHRFYAKRMFLMTCAAVICMAWTLVSAMAPPPVDVGTGYFIREEDOCIEHRY 180
Db 119 RYLAIAHHRFYTKRLTFWTCLAVICWMTLSVMAAPPPVLDVGTYSFIREEDOCIEHRS 178
QY 181 PRANDTLGFMLMLAVMAATHAVYKLLFEYRHRMKKPVQWPAISQWTFHGPATGQ 240
Db 179 PRANDSLGFMILLALILATQVLYLKLIFVHRRMKKPVQFAAVSQWTFHGPASQ 238
QY 241 AAANWLAGFGGPMPTLLGIRONGHAAS-RLLGMDVYKGEKQGRMFYATLFLFLM 299
Db 239 AAANWLAGFGGPTPTLLGIRONANTTGRRLVLDDEFKMERISRMFYIMTFLFLTM 298
QY 300 SPYIACVYRVFVKACAVPHRYLATAVMMSFAQAAVNPVCFILNDLKKCL-TTHAPCW 358
299 GPVLVACVYRVFARGVPGGFLTAAVMMSFAQAGINPVCFISNRELRCFSTLLYC- 357
359 GTGGAAPAREPYCVM 373
358 --RKSLPREPYCVI 370

RESULT 11

US-09-875-076-26
Sequence 26, Application US/09875076
Patent No. 6869776
GENERAL INFORMATION:
APPLICANT: Chen, Ruoping
APPLICANT: Dang, Huong T.
APPLICANT: Liaw, Chen W.

```
APPLICANT: Lin, I-Lin
TITLE OF INVENTION: Human Orphan G Protein Coupled Receptors
FILE REFERENCE: AREN0050
CURRENT APPLICATION NUMBER: US/09/875,076
CURRENT FILING DATE: 2001-06-06
PRIOR APPLICATION NUMBER: 09/417,044
PRIOR FILING DATE: 1999-10-12
PRIOR APPLICATION NUMBER: 60/120,416
PRIOR FILING DATE: 1999-02-16
PRIOR APPLICATION NUMBER: 60/121,851
PRIOR FILING DATE: 1999-02-26
PRIOR APPLICATION NUMBER: 60/123,946
PRIOR FILING DATE: 1999-03-12
PRIOR APPLICATION NUMBER: 60/123,949
PRIOR FILING DATE: 1999-03-12
PRIOR APPLICATION NUMBER: 60/136,436
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/136,437
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/136,439
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/136,567
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/137,127
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/137,131
PRIOR FILING DATE: 1999-05-28
PRIOR APPLICATION NUMBER: 60/141,448
PRIOR FILING DATE: 1999-06-29
PRIOR APPLICATION NUMBER: 60/156,653
PRIOR FILING DATE: 1999-09-29
PRIOR APPLICATION NUMBER: 60/156,633
PRIOR FILING DATE: 1999-09-29
PRIOR APPLICATION NUMBER: 60/156,555
PRIOR FILING DATE: 1999-09-29
PRIOR APPLICATION NUMBER: 60/156,634
PRIOR FILING DATE: 1999-09-29
PRIOR APPLICATION NUMBER: 60/157,280
PRIOR FILING DATE: 1999-10-01
PRIOR APPLICATION NUMBER: 60/157,294
PRIOR FILING DATE: 1999-10-01
PRIOR APPLICATION NUMBER: 60/157,281
PRIOR FILING DATE: 1999-10-01
PRIOR APPLICATION NUMBER: 60/157,293
PRIOR FILING DATE: 1999-10-01
PRIOR APPLICATION NUMBER: 60/157,282
PRIOR FILING DATE: 1999-10-01
NUMBER OF SEQ ID NOS: 74
SOFTWARE: Patent In Ver. 2.1
SEQ ID NO 26
LENGTH: 370
TYPE: PRT
ORGANISM: Homo sapiens
US-09-875-076-26

Query Match      64.7%; Score 1288.5; DB 2; Length 370;
Best Local Similarity 62.7%; Pred. No. 1.2e-107;
Matches 235; Conservative 56; Mismatches 77; Indels 7; Gaps 4;
```

```
179 FRANDSLGFMILLALILATQULVYLKLFYVHDKRKMPVQFVAVASQNTFTHGPGASQ 238
QY 241 AAANWIAFGRGMPPTLLGIRONGHAAS-RLTGMDEVKRGKGRMFYATLLFLILW 299
DB 229 AAANWLAGRGGRPTPTLLGIRONGANTTGRRLTLVDEFRKREKRISRMEYIMTFLILW 298
QY 300 SPYIACWYRVVVKACANPHRYLATAVNMSFQAQAVNPVLCVLLKDLKCL-TTHAPCW 358
DB 299 GPVLVACWYRVFARBPVVGGLTAAVWMSFQAQINPVCIFSNRELRCFSTLLYC- 357
QY 359 GTGGAAPAREPYCWM 373
DB 358 --RKSLRPREYCVI 370

RESULT 12
US-09-622-439-2
Sequence 2, Application US/09622439
Patent No. 655344
APPLICANT: Yamanouchi Pharmaceutical Co., Ltd.
TITLE OF INVENTION: A novel G protein coupled receptor protein
FILE REFERENCE: Y9905
CURRENT APPLICATION NUMBER: US/09/622,439
PRIOR FILING DATE: 2000-08-17
PRIOR APPLICATION NUMBER: JP P1998-060245
PRIOR FILING DATE: 1998-03-12
PRIOR APPLICATION NUMBER: JP P1999-026774
NUMBER OF SEQ ID NOS: 26
SOFTWARE: Patent In Ver. 2.0
SEQ ID NO 2
LENGTH: 375
TYPE: PRT
ORGANISM: Homo sapiens
US-09-622-439-2

Query Match      51.8%; Score 1031; DB 2; Length 375;
Best Local Similarity 54.1%; Pred. No. 1.5e-84;
Matches 196; Conservative 62; Mismatches 92; Indels 12; Gaps 5;
```

```

; Patent No. 6808899
; GENERAL INFORMATION:
; APPLICANT: Yamamochi Pharmaceutical Co., Ltd.
; TITLE OF INVENTION: A novel G protein coupled receptor protein
; FILE REFERENCE: Y9905
; CURRENT APPLICATION NUMBER: US/10/318,142
; CURRENT FILING DATE: 2002-12-13
; PRIOR APPLICATION NUMBER: US/09/622,439
; PRIOR FILING DATE: 2000-08-17
; PRIOR APPLICATION NUMBER: JP P1998-060245
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: JP P1999-026774
; PRIOR FILING DATE: 1999-02-03
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 375
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-10-318-142-2

Query Match      51.8%; Score 1031; DB 2; Length 375;
Best Local Similarity 54.1%; Pred. No. 1.5e-84;
Matches 196; Conservative 62; Mismatches 92; Indels 12; Gaps 5;

QY 1 MANTTGEPEVSGALSPPSASAVYKLVLTGLIMCVSLAGNALISLTLKERALHKAPYF 60
DB 1 MANAS-----EPGSGGGGEAAALGLKLTATSLTLCVSLAGNVLPALIVERSLHRAPIYL 56
QY 61 LLDLCIADGIRSAVCEPFYVLASVIRHSSWTF--ALSCIVAFMAVLPFCHAAFMIFCT 117
DB 57 LLDLCIADGIRALACIPAWMLARBAAGAPGALGCTLAFLALFCFHAAPFLILGV 116
QY 118 SYTRVYAIHHRFYARAGMTLMTCAA-VICMAWTLSTAMAPPPYVDVGTIKFIREDOCI 176
DB 117 GYTRYLAIAHHRFYARLAGMPCAMLVCAAMALALAAFPPLDGGGD--EDAPCAL 173
QY 177 EHRFYANDTLGFMMLAVTMAATHAVYKLLFEYRHRKMKVQWVPAISQWTFHGP 236
DB 174 EDRPDGAPGALGLLILAVVVGATHLVYLRLLFFIHDRKRRARLVPAVSHMTFHGP 233
QY 237 ATGOAANNTIAGRGPMPTLLIGIRONGHA-ASRRLGMDVEYGEKOLGRMFYATTLF 295
DB 234 ATGOAANNTAGRGPTPPALVGIIRPAGRGARLLVLEBKTEKRLCKMFYAVTLIF 293
QY 296 LILMSPIYIACVWRVVKACAVPHRYLATAVMMSFQOAVNPVYVCLNKDKLCITTHA 355
DB 294 LILMGYVVAASYLRVLVRPGAVPQAVLTASVMLTFQAGINPVVCFLEFNRLEDCRPAOF 353
QY 356 PC 357
DB 354 PC 355

```

RESULT 14
US-09-875-076-16
Sequence 16, Application US/09875076

```

; Patent No. 6869776
; GENERAL INFORMATION:
; APPLICANT: Chen, Ruoping
; APPLICANT: Dang, Huong T.
; APPLICANT: Liaw, Chen W.
; APPLICANT: Lin, I-Lin
; TITLE OF INVENTION: Human Orphan G Protein Coupled Receptors
; FILE REFERENCE: AREN0050
; CURRENT APPLICATION NUMBER: US/09/875,076
; CURRENT FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: 09/417,044
; PRIOR FILING DATE: 1999-10-12
; PRIOR APPLICATION NUMBER: 60/120,416
; PRIOR FILING DATE: 1999-02-16
; PRIOR APPLICATION NUMBER: 60/121,851
; PRIOR FILING DATE: 1999-02-26

```

```

; PRIOR APPLICATION NUMBER: 60/123,946
; PRIOR FILING DATE: 1999-03-12
; PRIOR APPLICATION NUMBER: 60/123,949
; PRIOR FILING DATE: 1999-03-12
; PRIOR APPLICATION NUMBER: 60/136,436
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/136,437
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/136,439
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/136,567
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/137,127
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/137,131
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/141,448
; PRIOR FILING DATE: 1999-06-29
; PRIOR APPLICATION NUMBER: 60/156,653
; PRIOR FILING DATE: 1999-09-29
; PRIOR APPLICATION NUMBER: 60/156,633
; PRIOR FILING DATE: 1999-09-29
; PRIOR APPLICATION NUMBER: 60/156,555
; PRIOR FILING DATE: 1999-09-29
; PRIOR APPLICATION NUMBER: 60/156,634
; PRIOR FILING DATE: 1999-09-29
; PRIOR APPLICATION NUMBER: 60/157,280
; PRIOR FILING DATE: 1999-10-01
; PRIOR APPLICATION NUMBER: 60/157,294
; PRIOR FILING DATE: 1999-10-01
; PRIOR APPLICATION NUMBER: 60/157,281
; PRIOR FILING DATE: 1999-10-01
; PRIOR APPLICATION NUMBER: 60/157,293
; PRIOR FILING DATE: 1999-10-01
; PRIOR APPLICATION NUMBER: 60/157,282
; PRIOR FILING DATE: 1999-10-01
; NUMBER OF SEQ ID NOS: 74
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 16
; LENGTH: 375
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-875-076-16

Query Match      51.8%; Score 1031; DB 2; Length 375;
Best Local Similarity 54.1%; Pred. No. 1.5e-84;
Matches 196; Conservative 62; Mismatches 92; Indels 12; Gaps 5;

QY 1 MANTTGEPEVSGALSPPSASAVYKLVLTGLIMCVSLAGNALISLTLKERALHKAPYF 60
DB 1 MANAS-----EPGSGGGGEAAALGLKLTATSLTLCVSLAGNVLPALIVERSLHRAPIYL 56
QY 61 LLDLCIADGIRSAVCEPFYVLASVIRHSSWTF--ALSCIVAFMAVLPFCHAAFMIFCT 117
DB 57 LLDLCIADGIRALACIPAWMLARBAAGAPGALGCTLAFLALFCFHAAPFLILGV 116
QY 118 SYTRVYAIHHRFYARAGMTLMTCAA-VICMAWTLSTAMAPPPYVDVGTIKFIREDOCI 176
DB 117 GYTRYLAIAHHRFYARLAGMPCAMLVCAAMALALAAFPPLDGGGD--EDAPCAL 173
QY 177 EHRFYANDTLGFMMLAVTMAATHAVYKLLFEYRHRKMKVQWVPAISQWTFHGP 236
DB 174 EDRPDGAPGALGLLILAVVVGATHLVYLRLLFFIHDRKRRARLVPAVSHMTFHGP 233
QY 237 ATGOAANNTIAGRGPMPTLLIGIRONGHA-ASRRLGMDVEYGEKOLGRMFYATTLF 295
DB 234 ATGOAANNTAGRGPTPPALVGIIRPAGRGARLLVLEBKTEKRLCKMFYAVTLIF 293
QY 296 LILMSPIYIACVWRVVKACAVPHRYLATAVMMSFQOAVNPVYVCLNKDKLCITTHA 355
DB 294 LILMGYVVAASYLRVLVRPGAVPQAVLTASVMLTFQAGINPVVCFLEFNRLEDCRPAOF 353
QY 356 PC 357

```

Db 354 PC 355

```
RESULT 15
US-09-622-439-22
; Sequence 22, Application US/09622439
; Patent No. 655344
; GENERAL INFORMATION:
; APPLICANT: Yamanouchi Pharmaceutical Co., Ltd.
; TITLE OF INVENTION: A novel G protein coupled receptor protein
; FILE REFERENCE: Y9905
; CURRENT APPLICATION NUMBER: US/09/622,439
; PRIOR FILING DATE: 2000-08-17
; PRIOR APPLICATION NUMBER: JP P1998-060245
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: JP P1999-026774
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO: 22
; LENGTH: 377
; TYPE: PRT
; ORGANISM: Rattus sp.
US-09-622-439-22
```

* Query Match 51.4%; Score 1023; DB 2; Length 377;
Best Local Similarity 53.9%; Pred. No. 7.8e-84;
Matches 195; Conservative 61; Mismatches 96; Indels 10; Gaps 5;

```
QY 1 MANTGEPREVSQALSPPSASAVVVKLVLLGLIMCVSLAGNALISLVLERALHKAPYYF 60
Db 1 MANNAS---EPGGGGGGAEEAALGLRLATLSLLICVSLAGNVLFALLIVERSLHRAPYYL 57
QY 61 LIDLCLADGIRSAVCEPFVLASVYRHGSSWTFSS---ALSCYIVFMAVLFCHFAAFMLFCI 117
Db 58 LIDLCLADGIRALACLPAVMLAARRAAAAAGTPPGALGCKLAFALFCFHAAPFLLDGV 117
QY 118 STTRVMAIAHHRFYAKRMTLWTCAA-VICMWTLSVAMAAPPVEDVGTYKFTIREDDQICF 176
Db 118 GVTTRYLAIAHHRFYARLWPCAMLVCAWMLALAAAPPVLDGGAD--DEDAPCAL 175
QY 177 EHRVFAVNDTLGEMLMALVLMATHAVYGLLLEFYRHRMKPEVQVPAISQWTFHGP 236
Db 176 EGRPDGAPGALGFLLLAIVGATHLVYRLFFIHDRRMRRPARLVPAVSHDWFHGP 235
QY 237 ATGQAAANNTAGGFGGMPPTLIGIRONGHA-ASRRLGMDVYKGEKOLGRMFYATITLP 295
Db 236 ATGQAAANNTAGGFGGMPPTLIGIRONGHA-ASRRLGMDVYKGEKOLGRMFYATITLP 295
QY 296 LILMSPIYACVYRVFVKAQVPHRYLATVVMKSPQAQVNPVCFLLNKLKCLTTTHA 355
Db 296 LILMGVYVAVSYLVIRGAVPOAYLTAVSWLTFQAQGINPVCFLLFNELNDCFRAQF 355
QY 356 PC 357
Db 356 PC 357
```

Search completed: March 7, 2006, 12:55:50
Job time : 47 secs

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioceleration Ltd.

OM protein - protein search, using bw model

Run on: March 7, 2006, 12:46:54 ; Search time 185 seconds
(without alignments)
885.883 Million cell updates/sec

Title: US-10-782-596-20

Perfect score: 1992
Sequence: 1 MANTGPEPEVSGALSPSPA.....HAPCWTGAPAPRPYCVM 373

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2443163 seqs, 439378781 residues

Total number of hits satisfying chosen parameters: 2443163

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 100%
Listing first 45 summaries

Database :

A_Geneseq.21.*
1: geneeqp19808:*
2: geneeqp19908:*
3: geneeqp20008:*
4: geneeqp20018:*
5: geneeqp20028:*
6: geneeqp20038:*
7: geneeqp20038:*
8: geneeqp20048:*
9: geneeqp20058:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1992	100.0	373	3	AAB02834 Human G p
2	1992	100.0	373	3	AAV71300 Human orp
3	1992	100.0	373	6	ABU92268 Human G p
4	1992	100.0	373	7	ADG98766 Human orp
5	1992	100.0	373	7	ADJ26929 Human end
6	1992	100.0	373	8	ADG68383 Human end
7	1992	100.0	373	8	ADP20176 Human G p
8	1992	100.0	373	8	ADQ75080 Human G p
9	1996	99.7	373	2	AAV30534 A G prote
10	1996	99.7	373	4	AAV97747 Human Mon
11	1996	99.7	373	6	ABP81720 Human Sre
12	1996	99.7	373	8	ADG12836 Human wil
13	1996	99.7	373	8	ADQ29142 Human nov
14	1996	99.7	373	9	AE887475 G prote
15	1996	99.7	378	4	AAW99953 Human exp
16	1996	99.7	387	8	ADG12838 Human HA
17	1996	99.7	611	7	ADP70426 Orphan re
18	1994	99.6	373	8	ADG65524 Human end
19	1994	99.6	373	8	ADQ75135 Human G p
20	1997	99.2	373	3	AAV32237 Human 7TM
21	1975	99.1	373	2	AAV30538 A G prote
22	1975	99.0	373	8	ADQ29143 Mouse nov
23	1973	99.0	373	3	AAV99715 Human G-p
24	1973	99.0	373	7	ADG77647 Human 122

25	1973	99.0	373	8	ADH68272 Human G-p
26	1893	95.0	388	8	ADG12840 Human hsr
27	1893	95.0	388	8	ADQ28774 Human SRE
28	1893	95.0	388	9	ADX44593 Enhanced
29	1893	95.0	388	9	ADY83823 hSREB3-en
30	1893	95.0	402	8	ADG12842 HA tagged
31	1386	69.6	284	4	AAV99947 Human exp
32	1288.5	64.7	370	2	AAV30537 A G prote
33	1288.5	64.7	370	2	AAV30533 A G prote
34	1288.5	64.7	370	3	AAV54323 A G-prote
35	1288.5	64.7	370	3	AAV85145 Amino aci
36	1288.5	64.7	370	3	AAV82837 Human G p
37	1288.5	64.7	370	3	AAV71303 Human orp
38	1288.5	64.7	370	4	AAE02497 Human CON
39	1288.5	64.7	370	4	AAV33558 Human CP2
40	1288.5	64.7	370	6	ABU08987 Human orp
41	1288.5	64.7	370	6	ABU92271 Human G p
42	1288.5	64.7	370	6	ABP81718 Human G p
43	1288.5	64.7	370	6	ABU09898 Human G-p
44	1288.5	64.7	370	7	ADG6433 Human GPC
45	1288.5	64.7	370	7	ADG98772 Human orp

ALIGNMENTS

RESULT 1
AAB02834
ID AAB02834 standard; protein, 373 AA.

AC	AA02834;	
XX		
DT	22-AUG-2000	(first entry)
XX		
DE	Human G protein coupled receptor hARR-2 protein SEQ ID NO:22.	
XX		
KW	Human; G protein coupled receptor; GPCR; transmembrane receptor;	
XX	identification; agonist; screening; therapeutic; pharmaceutical; mutant.	
OS	Homo sapiens.	
PN	W0200022131-A2.	
XX		
PD	20-APR-2000.	
XX		
PF	13-OCT-1999;	99WO-US024065.
XX		
PR	13-OCT-1998;	98US-00170496.
PR	12-NOV-1998;	98US-0108029P.
PR	20-NOV-1998;	98US-0109213P.
PR	27-NOV-1998;	98US-0110060P.
PR	16-FEB-1999;	99US-0120416P.
PR	26-FEB-1999;	99US-0121852P.
PR	12-MAR-1999;	99US-0123944P.
PR	12-MAR-1999;	99US-0123945P.
PR	12-MAR-1999;	99US-0123946P.
PR	12-MAR-1999;	99US-0123948P.
PR	12-MAR-1999;	99US-0123949P.
PR	12-MAR-1999;	99US-0123951P.
PR	28-MAY-1999;	99US-0136436P.
PR	28-MAY-1999;	99US-0136437P.
PR	28-MAY-1999;	99US-0136439P.
PR	28-MAY-1999;	99US-0137127P.
PR	28-MAY-1999;	99US-0137131P.
PR	28-MAY-1999;	99US-0137567P.
PR	29-JUN-1999;	99US-0141448P.
PR	27-AUG-1999;	99US-0151114P.
PR	03-SEP-1999;	99US-0152524P.
PR	29-SEP-1999;	99US-0156535P.
PR	29-SEP-1999;	99US-0156633P.
PR	29-SEP-1999;	99US-0156634P.
PR	01-OCT-1999;	99US-0157280P.

```

PR 01-OCT-1999; 99US-0157281P.
PR 01-OCT-1999; 99US-0157282P.
PR 01-OCT-1999; 99US-0157293P.
PR 01-OCT-1999; 99US-0157294P.
PR 12-OCT-1999; 99US-00416760.
PR 12-OCT-1999; 99US-00417044.
XX
XX (AREN-) ARENA PHARM INC.
XX
XX Behan DE, Lehmann-Brunema K, Chalmers DT, Chen R, Dang HT;
XX Gore M, Liaw CW, Lin I, Lowitz K, White C;
XX N-PSDB; AAA46028.
XX
XX WPI; 2000-317986/27.
XX
XX Non-endogenous, human G protein-coupled receptors for screening receptor,
XX inverse or partial agonists useful as therapeutic agents.
XX
XX Example 1; Page 97-98; 187pp; English.
XX
XX The present invention describes transmembrane receptors, preferably human
XX G protein coupled receptors (GPCR), for which the endogenous ligand is
XX unknown (orphan GPCR receptors). More specifically the present invention
XX relates to non-endogenous, constitutively activated versions of a human
XX GPCR. These non-endogenous human GPCRs can be useful for the direct
XX identification of candidate compounds as receptors agonists, inverse
XX agonists or partial agonists for use as pharmaceutical agents. AAA46017
XX
XX *CC AAA46126 and AAB02825 to AAB02859 represent sequences used in the
XX exemplification of the present invention
XX
XX SQ Sequence 373 AA;
XX
XX Query Match 100.0%; Score 1992; DB 3; Length 373;
XX Best Local Similarity 100.0%; Pred. No. 6.1e-218;
XX Matches 373; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1 MANTTGEPEVSGALSPSPASAYVKLVLLGLIMCVSLAGNATLSLVYKERALHKAPYF 60
DB 1 MANTTGEPEVSGALSPSPASAYVKLVLLGLIMCVSLAGNATLSLVYKERALHKAPYF 60
QY 61 LLDLCLADGIRAVNCPFFVLASVRHSSMTFSLSCKTYAFMAVLECFHAEMLFCTISVT 120
DB 61 LLDLCLADGIRAVNCPFFVLASVRHSSMTFSLSCKTYAFMAVLECFHAEMLFCTISVT 120
QY 121 RYWAIAHHRFPYAKRMTLMTCAAVICMAWTLTVMAAPPEVDVGTGYFIREEDQCIFEHR 180
DB 121 RYWAIAHHRFPYAKRMTLMTCAAVICMAWTLTVMAAPPEVDVGTGYFIREEDQCIFEHR 180
QY 181 FRANDTLGFMILMAVLMAATHAVYGLLFEYRHRDKRPVOMPAISQWTFHGPATGQ 240
DB 181 FRANDTLGFMILMAVLMAATHAVYGLLFEYRHRDKRPVOMPAISQWTFHGPATGQ 240
QY 241 AAANWTAGRGGRMPPTLLGIRONGHAASRRLGNDVYGEKLGMPFAITLLFLLMS 300
DB 241 AAANWTAGRGGRMPPTLLGIRONGHAASRRLGNDVYGEKLGMPFAITLLFLLMS 300
QY 301 PYVACWYRFVYKACVPHRYLATAVWMSPAQAAVNPVCFLLNKDLKCLTTHACWGT 360
DB 301 PYVACWYRFVYKACVPHRYLATAVWMSPAQAAVNPVCFLLNKDLKCLTTHACWGT 360
QY 361 GGAPAREPFCWM 373
DB 361 GGAPAREPFCWM 373
XX
XX RESULT 2
XX AA71300
XX ID AA71300 standard; protein; 373 AA.
XX AC AA71300;
XX
XX 02-NOV-2000 (first entry)
XX

```

```

DE Human orphan G protein-coupled receptor hARE-2.
XX
XX Human; orphan G protein-coupled receptor; GPCR; hARE-2; drug screening;
XX transmembrane receptor; expressed sequence tag; EST; signal cascade.
XX
XX Homo sapiens.
XX
XX WO200031258-A2.
XX
XX 02-JUN-2000.
XX
XX 13-OCT-1999; 99WO-US023687.
XX
XX 20-NOV-1998; 99US-0109213P.
XX 16-FEB-1999; 99US-0120416P.
XX 26-FEB-1999; 99US-0121852P.
XX 12-MAR-1999; 99US-0123946P.
XX 12-MAR-1999; 99US-0123949P.
XX 28-MAY-1999; 99US-0136436P.
XX 28-MAY-1999; 99US-0136437P.
XX 28-MAY-1999; 99US-0136439P.
XX 28-MAY-1999; 99US-0136567P.
XX 28-MAY-1999; 99US-0137127P.
XX 29-JUN-1999; 99US-0141448P.
XX 29-SEP-1999; 99US-0156555P.
XX 29-SEP-1999; 99US-0156633P.
XX 29-SEP-1999; 99US-0156634P.
XX 29-SEP-1999; 99US-0156653P.
XX 01-OCT-1999; 99US-0157280P.
XX 01-OCT-1999; 99US-0157281P.
XX 01-OCT-1999; 99US-0157282P.
XX 01-OCT-1999; 99US-0157293P.
XX 01-OCT-1999; 99US-0157294P.
XX 12-OCT-1999; 99US-00416760.
XX 12-OCT-1999; 99US-00417044.
XX
XX (AREN-) ARENA PHARM INC.
XX
XX Chen R, Dang HT, Liaw CW, Lin I;
XX
XX WPI; 2000-400068/34.
XX N-PSDB; AAD01127.
XX
XX Novel human orphan G protein-coupled receptors and the encoding cDNAs for
XX use in the identification of G protein-coupled receptor agonists.
XX
XX Claim 38; Page 67-68; 102pp; English.
XX
XX The present amino acid sequence is the hARE-2, an endogenous human orphan
XX G protein-coupled receptor (GPCR), expressed in the left and right
XX cerebellum. The hARE-2 cDNA was identified using ESTs (expressed sequence
XX tag) A1090920 and 68530 as a probe. The orphan GPCR of the invention,
XX like all GPCRs has seven transmembrane alpha helices with an
XX extracellular N-terminus and an intracellular C-terminus. However, no
XX endogenous ligands has yet been identified for the proteins of the
XX invention. The orphan GPCRs may be used in the identification of their
XX endogenous ligands, and to screen potential GPCR agonists and antagonists
XX for use as pharmaceutical agents. The proteins may also be used in the
XX study of GPCR-mediated signalling cascades, and to elucidate their
XX precise role in normal and diseased human conditions. Nucleic acid
XX encoding human orphan GPCRs may be used for tissue localization
XX expression analysis to provide information about their function in
XX healthy and pathological states
XX
XX SQ Sequence 373 AA;
XX
XX Query Match 100.0%; Score 1992; DB 3; Length 373;
XX Best Local Similarity 100.0%; Pred. No. 6.1e-218;
XX Matches 373; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1 MANTTGEPEVSGALSPSPASAYVKLVLLGLIMCVSLAGNATLSLVYKERALHKAPYF 60
XX

```

```

Db      1  MANTGEPREVSQALSPPSASAYVKLVLLGLIMCVSLAGNAIISLVKERALHKAPYF 60
Qy      61  LLDLCLADGIRSAVCEPFVLASVRHSSWTFSSALCKTIYAFMAVLFCEFAAFMLFCISVT 120
Db      61  LLDLCLADGIRSAVCEPFVLASVRHSSWTFSSALCKTIYAFMAVLFCEFAAFMLFCISVT 120
Qy      121  RYMAIAHHRFYAKRMTLMTCAAVI CMAMTLSVMAAPPVDPVGTGYFIREEDOCIFEHR 180
Db      121  RYMAIAHHRFYAKRMTLMTCAAVI CMAMTLSVMAAPPVDPVGTGYFIREEDOCIFEHR 180
Qy      181  FRANDTLGFMMLAVMAATHAVYKLLFEYRHRKMKPVQMPALISQNTFFHGPATGQ 240
Db      181  FRANDTLGFMMLAVMAATHAVYKLLFEYRHRKMKPVQMPALISQNTFFHGPATGQ 240
Qy      241  AAANWLAGFGRGMPPTLLGIRONGHNASRLLGMDEVKGEKOLGEMFYAITLLFLLWS 300
Db      241  AAANWLAGFGRGMPPTLLGIRONGHNASRLLGMDEVKGEKOLGEMFYAITLLFLLWS 300
Qy      301  PYIVACYWRFVYKACAVPHRYLATVWMSFAQAAVNPVFCFLINKDKKCLTTTHAPCWGT 360
Db      301  PYIVACYWRFVYKACAVPHRYLATVWMSFAQAAVNPVFCFLINKDKKCLTTTHAPCWGT 360
Qy      361  GGAPAREPBYCWM 373
Db      361  GGAPAREPBYCWM 373

RESULT 3
ABU92268 standard; protein; 373 AA.
ID      ABU92268
XX
AC      ABU92268;
XX
DT      16-JUL-2003 (first entry)
XX
De      Human G protein-coupled receptor hARE-2.
XX
KW      Human; orphan G protein-coupled receptor; GPCR; hARE-3; hARE-4;
KM      hARE-5; hRUP3; hRUP5; hRUP6; hRUP7; hGPCR27; hARE-1; hARE-2; hPR1; hG2A;
KN      hCHN3; hCHN4; hCHN6; hCHN8; hCHN9; hCHN10; hRUP4; signalling cascade.
XX
OS      Homo sapiens.
XX
PN      US2003017528-A1.
XX
PD      23-JUN-2003.
XX
PF      06-JUN-2001; 2001US-00875076.
XX
PR      20-NOV-1998; 98US-0109213P.
PR      16-FEB-1999; 99US-0120416P.
PR      26-FEB-1999; 99US-0121852P.
PR      12-MAR-1999; 99US-0123946P.
PR      28-MAY-1999; 99US-0136436P.
PR      28-MAY-1999; 99US-0136437P.
PR      28-MAY-1999; 99US-0136439P.
PR      28-MAY-1999; 99US-0136567P.
PR      28-MAY-1999; 99US-0137127P.
PR      28-MAY-1999; 99US-0137313P.
PR      29-JUN-1999; 99US-0141448P.
PR      28-SEP-1999; 99US-0156333P.
PR      29-SEP-1999; 99US-0156555P.
PR      29-SEP-1999; 99US-0156549P.
PR      12-OCT-1999; 99US-00417044.
XX
PA      (CHEN/) CHEN R.
PA      (DANG/) DANG H T.
PA      (LIAM/) LIAM C W.
PA      (LINI/) LIN I.
XX
PI      Chen R, Dang HT, Liam CW, Lin I;
XX

```

```

DR      WPI; 2003-428952/40.
XX      N-PSDB; ACA93265.
XX
PT      Novel endogenous, orphan, human G protein-coupled receptors useful for
PT      identification of modulators of the receptor and as research tools for
PT      understanding the role of the receptor in human body.
XX
PS      Claim 38; Page 27-28; 54pp; English.
XX
CC      The invention relates to a human G protein-coupled receptor (GPCR)
CC      appearing as ABU92259-ABU92277 (encoded by cDNAs AC93256-AC93274) named
CC      hARE-3, hARE-4, hARE-5, hRUP3, hRUP5, hRUP6, hRUP7, hGPCR27, hARE-1, hARE
CC      -2, hPR1, hG2A, hCHN3, hCHN4, hCHN6, hCHN8, hCHN9, hCHN10 and hRUP4.
CC      Also included are a plasmid comprising a vector and one of the cDNAs
CC      above and a host cell comprising the plasmid. The GPCRs are useful for
CC      the direct identification of candidate compounds as inverse agonists,
CC      agonists or partial agonists. In vitro and in vivo systems incorporating
CC      GPCRs is useful for elucidating and understanding the roles these
CC      receptors play in the human condition, both normal and diseased, as well
CC      as understanding the role of constitutive activation as it applies to
CC      understanding the signalling cascade. The cDNAs are useful for making a
CC      probe for dot-blot analysis against tissue mRNA and/or RT-PCR.
CC      Identification of the expression of the receptor in tissue samples. The
CC      present sequence represents a GPCR of the invention
XX
SQ      Sequence 373 AA;

Query Match      100.0%; Score 1992; DB 6; Length 373;
Best Local Similarity 100.0%; Pred. No. 6,1e-218;
Matches 373; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1  MANTGEPREVSQALSPPSASAYVKLVLLGLIMCVSLAGNAIISLVKERALHKAPYF 60
Db      1  MANTGEPREVSQALSPPSASAYVKLVLLGLIMCVSLAGNAIISLVKERALHKAPYF 60
Qy      61  LLDLCLADGIRSAVCEPFVLASVRHSSWTFSSALCKTIYAFMAVLFCEFAAFMLFCISVT 120
Db      61  LLDLCLADGIRSAVCEPFVLASVRHSSWTFSSALCKTIYAFMAVLFCEFAAFMLFCISVT 120
Qy      121  RYMAIAHHRFYAKRMTLMTCAAVI CMAMTLSVMAAPPVDPVGTGYFIREEDOCIFEHR 180
Db      121  RYMAIAHHRFYAKRMTLMTCAAVI CMAMTLSVMAAPPVDPVGTGYFIREEDOCIFEHR 180
Qy      181  FRANDTLGFMMLAVMAATHAVYKLLFEYRHRKMKPVQMPALISQNTFFHGPATGQ 240
Db      181  FRANDTLGFMMLAVMAATHAVYKLLFEYRHRKMKPVQMPALISQNTFFHGPATGQ 240
Qy      241  AAANWLAGFGRGMPPTLLGIRONGHNASRLLGMDEVKGEKOLGEMFYAITLLFLLWS 300
Db      241  AAANWLAGFGRGMPPTLLGIRONGHNASRLLGMDEVKGEKOLGEMFYAITLLFLLWS 300
Qy      301  PYIVACYWRFVYKACAVPHRYLATVWMSFAQAAVNPVFCFLINKDKKCLTTTHAPCWGT 360
Db      301  PYIVACYWRFVYKACAVPHRYLATVWMSFAQAAVNPVFCFLINKDKKCLTTTHAPCWGT 360
Qy      361  GGAPAREPBYCWM 373
Db      361  GGAPAREPBYCWM 373

RESULT 4
ADG98766 standard; protein; 373 AA.
ID      ADG98766
XX
AC      ADG98766;
XX
DT      11-MAR-2004 (first entry)
XX
De      Human orphan GPCR protein, ARE-2.
XX
KW      Human; G protein-coupled receptor; GPCR; research tool; receptor.
XX
OS      Homo sapiens.
XX

```

```
XX US2003148450-A1.
PN
XX
XX 07-AUG-2003.
PD
XX
XX 17-OCT-2002; 2002US-00272983.
PF
XX
PR 20-NOV-1998; 98US-0109213P.
PR 16-FEB-1999; 99US-0120416P.
PR 26-FEB-1999; 99US-0121852P.
PR 12-MAR-1999; 99US-0123946P.
PR 12-MAR-1999; 99US-0123949P.
PR 28-MAY-1999; 99US-0136436P.
PR 28-MAY-1999; 99US-0136437P.
PR 28-MAY-1999; 99US-0136439P.
PR 28-MAY-1999; 99US-0136567P.
PR 28-MAY-1999; 99US-0137127P.
PR 28-MAY-1999; 99US-0137131P.
PR 29-JUN-1999; 99US-0141448P.
PR 28-SEP-1999; 99US-0156333P.
PR 29-SEP-1999; 99US-0156555P.
PR 29-SEP-1999; 99US-0156634P.
PR 12-OCT-1999; 99US-00417044.
XX
XX (CHEN/) CHEN R.
PA (DANG/) DANG H T.
PA (LIAM/) LIAM C W.
PA (LINI/) LIN I.
XX
XX Chen R, Dang HT, Liam CW, Lin I;
PI
XX
XX MPI: 2003-897571/82.
DR N-PSDB; ADG98765.
XX
XX New cDNA encoding a human G protein coupled receptor, useful for making a
PT probe for dot-blot analysis against tissue-mRNA, and/or for RT-PCR
PT identification of the expression of the receptor in tissue samples.
XX
XX Claim 38; SEQ ID NO 20; 52pp; English.
XX
XX The present invention provides novel human G protein-coupled receptor
XX (GPCR) proteins and their encoding nucleic acids. The invention is useful
XX for making a probe for dot-blot analysis and for RT-PCR identification of
XX the expression of the receptor in tissue samples. The invention is also
XX useful for identifying candidate compounds as inverse agonists, agonists
XX or partial agonists and as research tools in determining the location of
XX the receptors within the body. The present sequence is human orphan G
XX protein-coupled receptor protein.
XX
XX Sequence 373 AA;
SQ
Query Match 100.0%; Score 1992; DB 7; Length 373;
Best Local Similarity 100.0%; Pred. No. 6, 1e-218;
Matches 373; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MANTTGPPEVSGALSPPSASAYVKVLTGLIMCVSIAGAILSLVTKERAIHKAPYR 60
DB 1 MANTTGPPEVSGALSPPSASAYVKVLTGLIMCVSIAGAILSLVTKERAIHKAPYR 60
QY 61 LIDLCLADGIRSAVCFPEVLASVRHGSSWTFSAISCRTIVAFMAVLFCHFAFMFCISVT 120
DB 61 LIDLCLADGIRSAVCFPEVLASVRHGSSWTFSAISCRTIVAFMAVLFCHFAFMFCISVT 120
QY 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLISVAMAFPPVDVGTYKFIREDDCIIEHRY 180
DB 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLISVAMAFPPVDVGTYKFIREDDCIIEHRY 180
QY 181 FKXNDTIGFMLNLAIVMAATHAVYKGLLEFYRHRKMKPVOMT/PATSONMTFHPGATGQ 240
DB 181 FKXNDTIGFMLNLAIVMAATHAVYKGLLEFYRHRKMKPVOMT/PATSONMTFHPGATGQ 240
QY 241 AAANWTAGFGRGPMPTLLGIRONGHAASRLLGMDVEKGEKOLGRMFVAITLLFLLIMS 300
DB 241 AAANWTAGFGRGPMPTLLGIRONGHAASRLLGMDVEKGEKOLGRMFVAITLLFLLIMS 300
```

```
DB 241 AAANWTAGFGRGPMPTLLGIRONGHAASRLLGMDVEKGEKOLGRMFVAITLLFLLIMS 300
QY 301 PIYVACYRVEFYKACAVPHRYLATVWMSFAQAAVNPVFCFLNLDLKKCLTTTAAPCWGT 360
DB 301 PIYVACYRVEFYKACAVPHRYLATVWMSFAQAAVNPVFCFLNLDLKKCLTTTAAPCWGT 360
QY 361 GGAPAPREPYCVM 373
DB 361 GGAPAPREPYCVM 373
RESULT 5
ADJ26929
ID ADJ26929 standard; protein; 373 AA.
XX
XX ADJ26929;
AC
XX 20-MAY-2004 (first entry)
DT
XX
XX Human endogenous orphan G-protein coupled receptor ARK-2 protein.
DE
XX Human; G protein-coupled receptor; GPCR; dot-blot analysis;
XX pharmaceutical agent; receptor.
XX
XX Homo sapiens.
OS
XX
XX US2003175891-A1.
PN
XX
XX 18-SEP-2003.
PD
XX
XX 21-MAR-2003; 2003US-00393807.
PF
XX
XX 20-NOV-1998; 98US-0109213P.
XX 16-FEB-1999; 99US-0120416P.
XX 26-FEB-1999; 99US-0121852P.
XX 12-MAR-1999; 99US-0123946P.
XX 12-MAR-1999; 99US-0123949P.
XX 28-MAY-1999; 99US-0136436P.
XX 28-MAY-1999; 99US-0136437P.
XX 28-MAY-1999; 99US-0136439P.
XX 28-MAY-1999; 99US-0136567P.
XX 28-MAY-1999; 99US-0137127P.
XX 28-MAY-1999; 99US-0137131P.
XX 29-JUN-1999; 99US-0141448P.
XX 28-SEP-1999; 99US-0156333P.
XX 29-SEP-1999; 99US-0156555P.
XX 29-SEP-1999; 99US-0156634P.
XX 29-SEP-1999; 99US-0156637P.
XX 01-OCT-1999; 99US-0157280P.
XX 01-OCT-1999; 99US-0157281P.
XX 01-OCT-1999; 99US-0157282P.
XX 01-OCT-1999; 99US-0157293P.
XX 01-OCT-1999; 99US-0157294P.
XX 12-OCT-1999; 99US-00417044.
XX 17-OCT-2002; 2002US-00272983.
XX
XX (CHEN/) CHEN R.
PA (DANG/) DANG H T.
PA (LIAM/) LIAM C W.
PA (LINI/) LIN I.
XX
XX Chen R, Dang HT, Liam CW, Lin I;
PI
XX
XX MPI: 2003-898539/82.
DR N-PSDB; ADJ26928.
XX
XX New human G protein-coupled receptor and its coding cDNA, useful for
PT disease or disorder identification and/or selection, for screening of
PT candidate compounds useful as pharmaceutical agents, and in research
PT applications.
XX
XX Claim 38; SEQ ID NO 20; 53pp; English.
PS
XX
```

CC The present invention relates to human endogenous orphan G protein-coupled receptor (GPCR) proteins and polynucleotides encoding such proteins. The cDNA sequence of the human G protein-coupled receptor (GPCR) is useful in making a probe for dot-blot analysis against tissue-mRNA and/or for RT-PCR identification of the expression of the receptor in tissue samples. GPCR sequences of the invention may be used in disease/disorder identification and/or selection, in screening of CC candidate compounds for use as pharmaceutical agents and in research settings. The present sequence is human endogenous orphan GPCR protein.

XX Sequence 373 AA;

Query Match 100.0%; Score 1992; DB 7; Length 373;
Best Local Similarity 100.0%; Pred. No. 6, 1e-218; Indels 0; Gaps 0;
Matches 373; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MANTTGEPEVSGALSPSPASAVYKLVLLGLIMCVSLAGNALISLLVTKERALHKAPYF 60
DB 1 MANTTGEPEVSGALSPSPASAVYKLVLLGLIMCVSLAGNALISLLVTKERALHKAPYF 60
QY 61 LLDLCLADGIRSAVCEPFLVLAIVRHGSSWTFSLASCKIYAFMAVLECFHAAFMLEICISVT 120
DB 61 LLDLCLADGIRSAVCEPFLVLAIVRHGSSWTFSLASCKIYAFMAVLECFHAAFMLEICISVT 120
QY 121 RYMAIAHHRFYAKRMVLTCAAVICAMVLTSLVMAAPFPVDVGTYSKFIREDDCIFEHRY 180
DB 121 RYMAIAHHRFYAKRMVLTCAAVICAMVLTSLVMAAPFPVDVGTYSKFIREDDCIFEHRY 180
QY 181 FRANDTLGFMMLVLAIVMAATHAVYKLLLEFYRHRIKQVQVPAISQWTFHGPATQ 240
DB 181 FRANDTLGFMMLVLAIVMAATHAVYKLLLEFYRHRIKQVQVPAISQWTFHGPATQ 240
QY 241 AAANWYAGRGGRMPTLLGIRONGHAAARRLLGMEVYGEKLGMPFAITLLFILLMS 300
DB 241 AAANWYAGRGGRMPTLLGIRONGHAAARRLLGMEVYGEKLGMPFAITLLFILLMS 300
QY 301 PIIVACYMVFYKACVPHRYLTAVWMSPPAAQVNPVYCFLLNKDLKKCLTTTHAPCWGT 360
DB 301 PIIVACYMVFYKACVPHRYLTAVWMSPPAAQVNPVYCFLLNKDLKKCLTTTHAPCWGT 360
QY 361 GGAPAREPEYCVW 373
DB 361 GGAPAREPEYCVW 373

RESULT 6
ADG6383
ID ADG6383 Standard; protein; 373 AA.
AC ADG6383;
XX
XX 11-MAR-2004 (first entry)
XX
DE Human endogenous orphan GPCR hARE-2.
XX
KM Human; receptor; endogenous orphan GPCR; G protein-coupled receptor;
KW transmembrane domain 6.
OS Homo sapiens.
XX
XX US2003229216-A1.
XX
XX 11-DEC-2003.
XX
XX 16-APR-2003; 2003US-00417820.
XX
XX 13-OCT-1998; 98US-0110496.
PR 12-NOV-1998; 98US-0108029P.
PR 20-NOV-1998; 98US-0109213P.
PR 27-NOV-1998; 98US-0110060P.
PR 16-FEB-1999; 99US-0120416P.
PR 26-FEB-1999; 99US-0121852P.
PR 12-MAR-1999; 99US-0123944P.

PR 12-MAR-1999; 99US-0123945P.
PR 12-MAR-1999; 99US-0123946P.
PR 12-MAR-1999; 99US-0123948P.
PR 12-MAR-1999; 99US-0123949P.
PR 12-MAR-1999; 99US-0123951P.
PR 12-MAR-1999; 99US-0123951P.
PR 28-MAY-1999; 99US-0136436P.
PR 28-MAY-1999; 99US-0136437P.
PR 28-MAY-1999; 99US-0136439P.
PR 28-MAY-1999; 99US-0136567P.
PR 28-MAY-1999; 99US-0137127P.
PR 28-MAY-1999; 99US-0137131P.
PR 29-JUN-1999; 99US-014148P.
PR 27-AUG-1999; 99US-0151114P.
PR 03-SEP-1999; 99US-0152524P.
PR 29-SEP-1999; 99US-0156555P.
PR 29-SEP-1999; 99US-0156633P.
PR 29-SEP-1999; 99US-0156634P.
PR 29-SEP-1999; 99US-0156635P.
PR 01-OCT-1999; 99US-0157280P.
PR 01-OCT-1999; 99US-0157281P.
PR 01-OCT-1999; 99US-0157282P.
PR 01-OCT-1999; 99US-0157293P.
PR 01-OCT-1999; 99US-0157294P.
PR 12-OCT-1999; 99US-00416760.

XX (CHEN/) CHEN R.
PA (LIAN/) LIAN C W.
PA (LOWITZ/) LOWITZ K.
PA (CHAL/) CHALMERS D T.
PA (BEHA/) BEHAN D P.

PI Chen R, Lian CW, Lowitz K, Chalmers DT, Behan DP;

DR WPI, 2004-052038/05.

XX N-PSDB; ADG6382.

PT New cDNA encoding a non-endogenous, constitutively activated version of a
PT human G protein-coupled receptor, useful for identifying receptor,
PT inverse or partial agonists having potential applicability as therapeutic
PT agents.

XX Example 1; SEQ ID NO 22; 110pp; English.

XX The invention relates to a cDNA encoding a non-endogenous, constitutively
XX activated version of a human G protein-coupled receptor comprising hARE-
XX 3 (F313K), hARE-4 (V233K), hARE-5 (A240K), hGPCR14 (L257K), hGPCR27 (C283K),
XX hARE-1 (E232K), hARE-2 (G285K), hEPRI (L239K), hG2A (K232A), hRUP2 (L224K),
XX hRUP5 (A236K), hRUP6 (N267K), hRUP7 (A302K), hCHN4 (V236K), hMC4 (V244K),
XX hCHN3 (S284K), hCHN6 (L352K), hCHN8 (N235K) or hH9 (F236K). Also included are
XX a non-endogenous version of a human G protein-coupled receptor encoded by
XX the cDNA, a plasmid comprising the vector and the cDNA and a host cell
XX comprising the plasmid. The cDNA encodes a non-endogenous, constitutively
XX activated version of a human G protein-coupled A11 receptor comprising
XX the angiotensin II type 1 receptor hAT1 (F239K), hAT1 (N111A),
XX hAT1 (ATK2551C), a domain swap mutant) or hAT1 (A243*). The mutation is of
XX an amino acid 16 residues from the proline in transmembrane domain 6 and
XX is usually to a lysine. The cDNA is useful for identifying candidate
XX compounds as receptor agonists, inverse agonists or partial agonists
XX having potential applicability as therapeutic agents. The present
XX sequence represents a wild-type human GPCR.

XX Sequence 373 AA;

Query Match 100.0%; Score 1992; DB 8; Length 373;
Best Local Similarity 100.0%; Pred. No. 6, 1e-218; Indels 0; Gaps 0;
Matches 373; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MANTTGEPEVSGALSPSPASAVYKLVLLGLIMCVSLAGNALISLLVTKERALHKAPYF 60
DB 1 MANTTGEPEVSGALSPSPASAVYKLVLLGLIMCVSLAGNALISLLVTKERALHKAPYF 60
QY 61 LLDLCLADGIRSAVCEPFLVLAIVRHGSSWTFSLASCKIYAFMAVLECFHAAFMLEICISVT 120

Db	61	LIDDLADGIRSAVCEPPFLASVRRHSSMTFSLSKCIYAFAVLFCEHAFMLFCISVT	120
Oy	121	RYMAIAHHRFYAKRMTLMTCAAVTICMAWTLSVMAEPPEVDVGTYKFIREDQCIFEHR	180
Db	121	RYMAIAHHRFYAKRMTLMTCAAVTICMAWTLSVMAEPPEVDVGTYKFIREDQCIFEHR	180
Oy	181	FRANDTLGMLMLAVLMAATHAVYGLLLFEYTHRRKKRPQWNPALSONWTFHGPGATGQ	240
Db	181	FRANDTLGMLMLAVLMAATHAVYGLLLFEYTHRRKKRPQWNPALSONWTFHGPGATGQ	240
Oy	241	AAANNIAGRGPMPTLLGIRONGHAASRLIGMDEVGKEKOLGRMFYAITLLFLLWS	300
Db	241	AAANNIAGRGPMPTLLGIRONGHAASRLIGMDEVGKEKOLGRMFYAITLLFLLWS	300
Oy	301	PYIVACYMVFVKACAVPHRYLATAVMWSFAQAAVNPVCFELNKKLKKCLTHAPCWGT	360
Db	301	PYIVACYMVFVKACAVPHRYLATAVMWSFAQAAVNPVCFELNKKLKKCLTHAPCWGT	360
Oy	361	GGAPAPREPYCVM 373	
Db	361	GGAPAPREPYCVM 373	
RESULT 7			
ADP20176	ID	ADP20176 standard; protein; 373 AA.	
XX	AC	ADP20176;	
XX	DT	26-AUG-2004 (first entry)	
XX	DE	Human G protein coupled receptor hARE-2.	
XX	XX	antiinflammatory; GPCR-agonist; GPCR-antagonist;	
KM	KM	G protein-coupled receptor; GPCR; GPCR modulator; inflammation;	
KM	KM	pharmaceutical composition; inflammatory disorder; human; hARE-2.	
XX	OS	Homo sapiens.	
XX	PN	US2004110238-A1.	
PD	XX	10-JUN-2004.	
XX	PF	26-NOV-2003; 2003US-00723955.	
XX	XX		
PR	13-OCT-1998;	98US-00170496.	
PR	12-NOV-1998;	98US-0108029P.	
PR	20-NOV-1998;	98US-0109213P.	
PR	27-NOV-1998;	98US-0110060P.	
PR	16-FEB-1999;	99US-0120416P.	
PR	26-FEB-1999;	99US-0121852P.	
PR	12-MAR-1999;	99US-0123944P.	
PR	12-MAR-1999;	99US-0123945P.	
PR	12-MAR-1999;	99US-0123946P.	
PR	12-MAR-1999;	99US-0123948P.	
PR	12-MAR-1999;	99US-0123949P.	
PR	12-MAR-1999;	99US-0123951P.	
PR	28-MAY-1999;	99US-0136436P.	
PR	28-MAY-1999;	99US-0136437P.	
PR	28-MAY-1999;	99US-0136439P.	
PR	28-MAY-1999;	99US-0136567P.	
PR	28-MAY-1999;	99US-0137127P.	
PR	28-MAY-1999;	99US-0137131P.	
PR	29-JUN-1999;	99US-0141448P.	
PR	27-AUG-1999;	99US-0151114P.	
PR	03-SEP-1999;	99US-0152524P.	
PR	29-SEP-1999;	99US-0156555P.	
PR	29-SEP-1999;	99US-0156633P.	
PR	29-SEP-1999;	99US-0156634P.	
PR	29-SEP-1999;	99US-0156633P.	
PR	01-OCT-1999;	99US-0157280P.	
PR	01-OCT-1999;	99US-0157281P.	
PR	01-OCT-1999;	99US-0157282P.	

PR		01-OCT-1999;	99US-0157293P.
PR		01-OCT-1999;	99US-0157294P.
PR		12-OCT-1999;	99US-0041676O.
PR		16-APR-2003;	2003US-0041782O.
XX			
PA	(CHEN)/	CHEN R.	
PA	(LIAM)/	LIAM C W.	
PA	(LOWITZ)	LOWITZ K.	
PA	(CHAL)/	CHALMERS D T.	
PA	(BEHAN)/	BEHAN D P.	
PI	Chen R,	Liam CW, Lowitz K, Chalmers DT, Behan DP;	
XX			
DR	WPI:	2004-440359/41.	
DR	N-PDBJ:	ADP20175.	
XX			
PT		Identifying one or more candidate compounds as a modulator of a G protein	
PT	-coupled receptor (GPCR), useful for treating disorders or conditions		
PT	associated with expression or activity of the GPCR.		
XX			
PS	Example 1; SEQ ID NO 22; 106pp; English.		
XX			
CC	The invention describes a method of identifying one or more candidate		
CC	compounds as a modulator of a G protein-coupled receptor that comprises a		
CC	fully defined sequence of 337 amino acids (SEQ ID NO: 82), comprising		
CC	contacting the one or more compounds with a host cell or with a membrane		
CC	of a host cell that expresses the receptor, and measuring the ability of		
CC	the compound or compounds to inhibit or stimulate functionality of the		
CC	receptor. Also described are: a method for identifying one or more		
CC	candidate compounds as a modulator of inflammation; a method for		
CC	identifying one or more candidate compounds as a modulator of a G protein		
CC	-coupled receptor; a compound identified by any of the methods cited		
CC	above; a pharmaceutical composition; a method of modulating the activity		
CC	of a G protein-coupled receptor having the amino acid sequence of SEQ ID		
CC	NO:82; a method of modulating inflammation in a mammal in need of the		
CC	modulating; a method of inhibiting inflammation in a mammal in need of		
CC	the inhibiting; a method of preventing or treating an inflammatory		
CC	disorder in a mammal in need of the preventing or treating; and a method		
CC	of treating an inflammatory disorder. The methods and compositions of the		
CC	present invention are useful for the treatment of diseases or conditions		
CC	associated with aberrant expression or activity of the GPCR e.g.		
CC	inflammation. This is the amino acid sequence of human G protein coupled		
CC	receptor (GPCR) hARE-2.		
SQ	Sequence 373 AA;		
	Query Match	100.0%; Score 1992; DB 8; Length 373;	
	Best Local Similarity	100.0%; Pred. No. 6.1e-218;	
	Matches 373; Conservative	0; Mismatches 0; Indels 0; Gaps 0	
QY	1	MANTGGEDEEVSAGLSPSSASAYKLVLLGLIMCVSLAGNALILSLVLERALKHPYPF	60
DB	1	MANTTGEDEERSGALSPSSASYKLVLLGLIMCYSLAGNALILSLVLERALKHPYPF	60
	61	IIDLICLADGIRSAVCPFPVLASVRHGSWTFSALSCKIYAFAVAFLFCFHAAFMLCISVT	120
QY	61	IIDLICLADGIRSAVCFPVLASVRHGSSWTFSALSKIYAFAVAFLFCFHAAFMLCISVT	120
DB	61	IIDLICLADGIRSAVCFPVLASVRHGSSWTFSALSKIYAFAVAFLFCFHAAFMLCISVT	120
QY	121	RYMAIAHRFYAKRMTLTMCALTICMAWTLSTYAMAAPPVDVGTYKFIEEDDCITEHR	180
DB	121	RYMAIAHRFRFYAKRMTLTMCALTICMAWTLSTYAMAAPPVDVGTYKFIEEDDCITEHR	180
QY	181	FCAANDTGFMMLAVLMATAHTAVYGKLILFEYRHRMKRKVOWPAISQWTFPGPATQG	240
DB	181	FCAANDTGFMMLAVLMATAHTAVYGKLILFEYRHRMKRKVOWPAISQWTFPGPATQG	240
QY	241	AAANVIAGRGPMPEPTLLIGIRONGHAASRRLLGDENVGEKOLGMFYAITLLFTLLMS	3000
DB	241	AAANVIAGRGPMPEPTLLIGIRONGHAASRRLLGDENVGEKOLGMFYAITLLFTLLMS	3000
QY	301	PYIVACYWRVFYKACAVPHRYATLATVVMSEFAQAANVPYICFLINKDLKKCLTTHACWG	366
DB	301	PYIVACYWRVFYKACAVPHRYATLATVVMSEFAQAANVPYICFLINKDLKKCLTTHACWG	366

QY 361 GGAPAREPYCWM 373
 |||||
 DB 361 GGAPAREPYCWM 373

RESULT 8
 ADQ75080
 ID ADQ75080 standard; protein; 373 AA.

AC ADQ75080;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 DE Human G protein-coupled receptor ARE-2.
 XX
 KW Human; receptor; GPCR; G protein-coupled receptor; ARE-2.
 XX
 OS Homo sapiens.
 XX
 PN US2004137509-A1.
 PD 15-JUL-2004.
 XX
 PF 19-FEB-2004; 2004US-00782596.
 XX
 PR 20-NOV-1998; 98US-0109213P.
 PR 16-FEB-1999; 99US-0120416P.
 PR 26-FEB-1999; 99US-0121852P.
 PR 12-MAR-1999; 99US-0123946P.
 PR 12-MAR-1999; 99US-0123949P.
 PR 28-MAY-1999; 99US-0136437P.
 PR 28-MAY-1999; 99US-0136437P.
 PR 28-MAY-1999; 99US-0136439P.
 PR 28-MAY-1999; 99US-0136567P.
 PR 28-MAY-1999; 99US-0137127P.
 PR 28-MAY-1999; 99US-0137131P.
 PR 29-JUN-1999; 99US-0141448P.
 PR 28-SEP-1999; 99US-0156333P.
 PR 29-SEP-1999; 99US-0156555P.
 PR 29-SEP-1999; 99US-0156634P.
 PR 29-SEP-1999; 99US-0156633P.
 PR 01-OCT-1999; 99US-0157280P.
 PR 01-OCT-1999; 99US-0157281P.
 PR 01-OCT-1999; 99US-0157282P.
 PR 01-OCT-1999; 99US-0157293P.
 PR 01-OCT-1999; 99US-0157294P.
 PR 12-OCT-1999; 99US-00417044.
 PR 06-JUN-2001; 2001US-00875076.

XX (LIAM/) LIAM C W.
 PA (LINI/) LIN I.
 XX
 PI Llaw CW, Lin I;
 XX
 DR WPI, 2004-533360/51.
 DR N-PSDB; ADQ75079.
 XX
 PT Identifying one or more candidate compounds as modulators of a G protein-
 PT coupled receptor, useful as pharmaceutical agents, comprises measuring
 PT the ability of the compound or compounds to inhibit or stimulate
 PT functionality of the receptor.
 XX
 PS Claim 5; SEQ ID NO 20; 57bp; English.
 XX
 CC The invention relates to identifying one or more candidate compounds as
 CC modulators of a G protein-coupled receptor comprising an endogenous human
 CC ARE-2 polypeptide (appearing as ADQ75080) comprising measuring the ability
 CC of the compound or compounds to inhibit or stimulate functionality of the
 CC receptor. The endogenous human ARE-2 polypeptide is encoded by a
 CC nucleotide sequence, the nucleotide sequence is obtained by performing
 CC nucleic acid hybridisation on a sample of human DNA library using
 CC specific probe EST (expressed sequence tag) clone 68530, where the amino

CC acid at amino acid position 285 of the endogenous human ARE-2 polypeptide
 CC is substituted with another amino acid, and where the glycine at amino
 CC acid position 285 of SEQ ID NO. 20 is substituted with an amino acid
 CC other than glycine (e.g. lysine). The method is useful for identifying
 CC one or more candidate compounds as modulators of a G protein-coupled
 CC receptor. The compounds are useful as pharmaceutical agents, or in
 CC research. Also disclosed are the cDNA open reading frames of other human
 CC GPCRs identified using the EST probe. The present sequence represents a
 CC human GPCR whose encoding sequence was identified using the EST probe.

XX
 SQ Sequence 373 AA;
 Query Match 100.0%; Score 1992; DB 8; Length 373;
 Best Local Similarity 100.0%; Pred. No. 6.1e-218;
 Matches 373; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MANTGEPREVGALSPSPASAYVKLVLLGLIMCVSLAGNALISLVKERALHKAPYF 60
 |||||
 DB 1 MANTGEPREVGALSPSPASAYVKLVLLGLIMCVSLAGNALISLVKERALHKAPYF 60

QY 61 LLDLCIADGIRSAVCPFFYLASVRHGSWTFPSALSGKIYAFMAVLFCHFAAFMLFCISVT 120
 |||||
 DB 61 LLDLCIADGIRSAVCPFFYLASVRHGSWTFPSALSGKIYAFMAVLFCHFAAFMLFCISVT 120

QY 121 RYMAIAHHRFYAKRMTLWTCAAVTCMAWTLVYAMAPFPVFDVGYKFIREDQCFEHRY 180
 |||||
 DB 121 RYMAIAHHRFYAKRMTLWTCAAVTCMAWTLVYAMAPFPVFDVGYKFIREDQCFEHRY 180

QY 181 FRANDTLGFMLMLAVIMAAITAVYKGLLFEYRHRKRVQVPAISQWTHFGPATQ 240
 |||||
 DB 181 FRANDTLGFMLMLAVIMAAITAVYKGLLFEYRHRKRVQVPAISQWTHFGPATQ 240

QY 241 AAANWTAGRGPMPTLLGIRONGHARSRLIGMEVGEKOLGRMFATLLFLLMS 300
 |||||
 DB 241 AAANWTAGRGPMPTLLGIRONGHARSRLIGMEVGEKOLGRMFATLLFLLMS 300

QY 301 PYIVACYMRFVYKACAPHRYLATAVWMSPAQAAVNPVYCFLLNKLKCLTTHACWGT 360
 |||||
 DB 301 PYIVACYMRFVYKACAPHRYLATAVWMSPAQAAVNPVYCFLLNKLKCLTTHACWGT 360

QY 361 GGAPAREPYCWM 373
 |||||
 DB 361 GGAPAREPYCWM 373

RESULT 9
 AAY30534
 ID AAY30534 standard; protein; 373 AA.
 XX
 AC AAY30534;
 XX
 DT 15-NOV-1999 (first entry)
 XX
 DE A G protein-coupled receptor protein designated SREB3.
 XX
 KW G protein-coupled receptor protein; SREB3; central nervous system;
 KW inflammatory disorder; immunological.
 XX
 OS Homo sapiens.
 XX
 PN MO946378-A1.
 XX
 PD 16-SEP-1999.
 XX
 PF 11-MAR-1999; 99WO-JP001191.
 XX
 PR 12-MAR-1998; 98JP-00060245.
 PR 03-FEB-1999; 99JP-00026774.
 XX
 PA (YAMA) YAMANOUCHI PHARM CO LTD.
 XX
 PI Matsumoto M, Sugimoto T, Takasaki J, Salto T, Kobayashi M;

DR WPI; 1999-551407/46.
DR N-PSDB; AA210562.
XX
XX G protein-coupled receptor proteins expressed in the central nervous
PT system and genes encoding them.
XX
XX Example 1; Page 57-58; 72pp; Japanese.
XX
XX The present sequence represents a G protein-coupled receptor protein,
CC designated SREB3. The protein is expressed in the central nervous system.
CC The SREB products are used for the diagnosis and treatment of diseases of
CC the central nervous system, including inflammatory disorders of
CC immunological origin
XX
XX Sequence 373 AA;
SQ
Query Match 99.7%; Score 1986; DB 2; Length 373;
Best Local Similarity 99.7%; Pred. No. 3e-217;
Matches 372; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 MANTGEPREVSQALSPPSASAYVKLVLLGLIMCVSLAGNATLSLVKERALHKAPYF 60
DB 1 MANTGEPREVSQALSPPSASAYVKLVLLGLIMCVSLAGNATLSLVKERALHKAPYF 60
QY 61 LIDLCLADGIRSAVCEPFLASVRHSSWTFSSALCKIVAFAVAVLCFHAAPMLFCISVT 120
DB 61 LIDLCLADGIRSAVCEPFLASVRHSSWTFSSALCKIVAFAVAVLCFHAAPMLFCISVT 120
QY 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLSVMAAPPPVDVGTGYFIREEDOCIEHRY 180
DB 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLSVMAAPPPVDVGTGYFIREEDOCIEHRY 180
QY 181 FRANDTLGFMMLAVMAATHAVYKLLFEYRHRKRVQWVPALSONMTFHGPATQ 240
DB 181 FRANDTLGFMMLAVMAATHAVYKLLFEYRHRKRVQWVPALSONMTFHGPATQ 240
QY 241 AAANWLAGFGRGMPPTLLGIRONGHAASRLLGMDVGEKOLGMPFAITLLFLLWS 300
DB 241 AAANWLAGFGRGMPPTLLGIRONGHAASRLLGMDVGEKOLGMPFAITLLFLLWS 300
QY 301 PYIVACYMVFYKACVPHRYLATAVWMSFAQAANVPYICFLINKOLKKCLRTTHAPCWGT 360
DB 301 PYIVACYMVFYKACVPHRYLATAVWMSFAQAANVPYICFLINKOLKKCLRTTHAPCWGT 360
QY 361 GGAPAREPYCVM 373
DB 361 GGAPAREPYCVM 373
RESULT 10
AA97747
ID AA97747 standard; protein; 373 AA.
XX
XX AA97747;
XX
DT 06-AUG-2001 (first entry)
XX
DE Human Monalisa protein sequence.
XX
XX Monalisa; human; G-protein coupled receptor; infection; 1 HIV-1; HIV-2;
KW pain; cancer; diabetes; obesity; anorexia; bulimia; asthma; hypotension;
KW Parkinson's disease; acute heart failure; hypertension; osteoporosis;
KW urinary retention; angina pectoris; myocardial infarction; stroke; ulcers;
KW allergy; benign prostatic hypertrophy; migraine; psychotic disorder;
KW neurological disorder; anxiety; schizophrenia; manic depression;
KW delirium; dementia; severe mental retardation; dyskinesia; therapy;
KW Huntington's disorder; Gilles de la Tourette's syndrome.
XX
XX Homo sapiens.
XX
XX WO200132833-A2.
XX
XX 10-MAY-2001.
PD

XX
XX 06-NOV-2000; 2000MO-US030541.
PF
XX
XX 04-NOV-1999; 99US-00433840.
PR
XX
XX (SMRK) SMITHKLINE BEECHAM CORP.
PA (SMRK) SMITHKLINE BEECHAM PLC.
XX
XX Zhu Y, Li X, Vawter L;
PI
XX
XX WPI; 2001-335827/35.
DR
DR N-PSDB; AA91486.
XX
XX
XX New Monalisa G-protein coupled receptor polypeptides and polynucleotides,
PT useful for treating certain diseases (e.g. infections, pain or cancers),
PT in diagnostic assays, or for identifying compounds for therapy.
XX
XX Claim 1; Page 27; 32pp; English.
PS
XX
XX This sequence is the human Monalisa protein of the invention. The
CC Monalisa protein is a member of the G-protein coupled receptor family.
CC The Monalisa polypeptide and polynucleotide are useful for treating
CC infections e.g. bacterial, fungal or viral infections particularly those
CC caused by HIV-1 or HIV-2. The Monalisa sequences are also useful for
CC treating pain, cancers, diabetes, obesity, anorexia, bulimia, asthma,
CC Parkinson's disease, acute heart failure, hypotension, hypertension,
CC urinary retention, osteoporosis, angina pectoris, myocardial infarction,
CC stroke, ulcers, allergies, benign prostatic hypertrophy, migraine,
CC vomiting, psychotic and neurological disorders (including anxiety,
CC schizophrenia, manic depression, Huntington's disorder, and severe mental
CC retardation), dyskinesias, Huntington's disorder, and polynucleotide are also
CC useful in diagnostic assays, as well as in identifying compounds (e.g.
CC agonists or antagonists) that are potentially useful in therapy
XX
XX Sequence 373 AA;
SQ
Query Match 99.7%; Score 1986; DB 4; Length 373;
Best Local Similarity 99.7%; Pred. No. 3e-217;
Matches 372; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 MANTGEPREVSQALSPPSASAYVKLVLLGLIMCVSLAGNATLSLVKERALHKAPYF 60
DB 1 MANTGEPREVSQALSPPSASAYVKLVLLGLIMCVSLAGNATLSLVKERALHKAPYF 60
QY 61 LIDLCLADGIRSAVCEPFLASVRHSSWTFSSALCKIVAFAVAVLCFHAAPMLFCISVT 120
DB 61 LIDLCLADGIRSAVCEPFLASVRHSSWTFSSALCKIVAFAVAVLCFHAAPMLFCISVT 120
QY 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLSVMAAPPPVDVGTGYFIREEDOCIEHRY 180
DB 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLSVMAAPPPVDVGTGYFIREEDOCIEHRY 180
QY 181 FRANDTLGFMMLAVMAATHAVYKLLFEYRHRKRVQWVPALSONMTFHGPATQ 240
DB 181 FRANDTLGFMMLAVMAATHAVYKLLFEYRHRKRVQWVPALSONMTFHGPATQ 240
QY 241 AAANWLAGFGRGMPPTLLGIRONGHAASRLLGMDVGEKOLGMPFAITLLFLLWS 300
DB 241 AAANWLAGFGRGMPPTLLGIRONGHAASRLLGMDVGEKOLGMPFAITLLFLLWS 300
QY 301 PYIVACYMVFYKACVPHRYLATAVWMSFAQAANVPYICFLINKOLKKCLRTTHAPCWGT 360
DB 301 PYIVACYMVFYKACVPHRYLATAVWMSFAQAANVPYICFLINKOLKKCLRTTHAPCWGT 360
QY 361 GGAPAREPYCVM 373
DB 361 GGAPAREPYCVM 373
RESULT 11
ABP81720
ID ABP81720 standard; protein; 373 AA.

XX AC ABP81720;
 XX 04-MAR-2003 (first entry)
 DT 04-MAR-2003 (first entry)
 XX DE Human Strept3 protein SEQ ID NO:615.
 XX G protein-coupled receptor; GPCR; antigenic peptide; gene therapy;
 KM G protein-coupled receptor modulator; antibody; immune-related disease;
 KM growth-related disease; cell regeneration-related disease; AIDS; cancer;
 KM immunological-related disease; cell proliferative disease; autoimmune disease;
 KM Alzheimer's disease; atherosclerosis; infection; osteoarthritis; allergy;
 KM osteoporosis; cardiovascular; inflammation; Crohn's disease; diabetes;
 KM graft versus host disease; Parkinson's disease; multiple sclerosis; pain;
 KM psoriasis; anxiety; depression; schizophrenia; dementia; memory loss;
 KM mental retardation; epilepsy; asthma; tuberculosis; obesity; nausea;
 KM hypertension; hypotension; renal disorder; rheumatoid arthritis; trauma;
 KM ulcer.
 XX Homo sapiens.
 XX MO200261087-A2.
 XX 08-AUG-2002.
 PD 08-AUG-2002.
 XX 19-DEC-2001, 2001WO-US050107.
 PF 19-DEC-2001, 2000US-0257144P.
 XX 19-DEC-2000, 2000US-0257144P.
 PR 19-DEC-2000, 2000US-0257144P.
 XX (LIFE-) LIFESPAN BIOSCIENCES INC.
 PA Burner GC, Roush CL, Brown JP;
 PI MPI, 2003-046718/04.
 DR N-PSDB; AB242566.
 XX New isolated antigenic peptides e.g., for G protein-coupled receptors
 PT (GPCR), useful for diagnosing and designing drugs for treating conditions
 PT in which GPCRs are involved, e.g. AIDS, Alzheimer's disease, cancer or
 PT autoimmune diseases.
 XX Disclosure; Fig 1; 523p; English.
 PS The present invention describes antigenic peptides (I) comprising: (a)
 XX any one of 1601 sequences (see ABP82019 to ABP83119) of 12-24 amino
 CC acids. Also described: (1) an assay for the detection of a particular G
 CC protein-coupled receptor (GPCR) or a candidate polypeptide in a sample;
 CC and (2) an isolated antibody having high specificity and high affinity or
 CC avidity for a particular GPCR. (I) can be used as GPCR modulators and in
 CC gene therapy. The antigenic peptides for GPCRs are useful in detecting an
 CC antibody against a particular GPCR, and in the production of specific
 CC antibodies. The peptides and antibodies are also useful for detecting the
 CC presence or absence of corresponding GPCRs. The antigenic peptides for
 CC GPCRs and antibodies are useful for diagnosing and designing drugs for
 CC treating immune-related diseases, growth-related diseases, cell
 CC regeneration-related disease, immunological-related cell proliferative
 CC diseases, or autoimmune diseases, e.g. AIDS, Alzheimer's disease,
 CC atherosclerosis, bacterial, fungal, protozoan or viral infections,
 CC osteoarthritis, osteoporosis, cancer, cardiomyopathy, chronic and acute
 CC inflammation, allergies, Crohn's disease, diabetes, diabetes versus host
 CC disease, Parkinson's disease, multiple sclerosis, pain, psoriasis,
 CC anxiety, depression, schizophrenia, dementia, mental retardation, memory
 CC loss, epilepsy, asthma, tuberculosis, obesity, nausea, hypertension,
 CC hypotension, renal disorders, rheumatoid arthritis, trauma, ulcers, or
 CC any other disorder in which GPCRs are involved. The antibodies may be
 CC used in immunoassays and immunodiagnoses. AB242523 to AB242869 encode
 CC GPCR proteins given in ABP81675 to ABP82018, which are used in the
 CC exemplification of the present invention
 XX Sequence 373 AA;

Query Match 99.7%; Score 1986; DB 6; Length 373;
 Best Local Similarity 99.7%; Pred. No. 3e-217;

Matches 372; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 MANTGPEPEVSGALSPPSASAYVKLVLTGLIMCVSLAGNAIISLVTKERALKKAPYYF 60
 DB 1 MANTGPEPEVSGALSPPSASAYVKLVLTGLIMCVSLAGNAIISLVTKERALKKAPYYF 60
 QY 61 LLDLCIADGIRSAVCEPPVLASVRRGSSWTFSSALCKIYAFMAVLCFHAAMFLFCISVT 120
 DB 61 LLDLCIADGIRSAVCEPPVLASVRRGSSWTFSSALCKIYAFMAVLCFHAAMFLFCISVT 120
 QY 121 RYVAIHHRRFYAKRMTLMTCAVTCAMTSLVMAAPPPVDVCTYTFIREDDCIEHRV 180
 DB 121 RYVAIHHRRFYAKRMTLMTCAVTCAMTSLVMAAPPPVDVCTYTFIREDDCIEHRV 180
 QY 181 FKANDTLGFMPLMAVMAATHAVYGLLPEYHRHRKRPQWPAPISQMTFPGPATGQ 240
 DB 181 FKANDTLGFMPLMAVMAATHAVYGLLPEYHRHRKRPQWPAPISQMTFPGPATGQ 240
 QY 241 AAANWTAGFGRGMPPTLLGIRONGHAASRRLLGMDVXGKOLGMEFYAITLLFLLWS 300
 DB 241 AAANWTAGFGRGMPPTLLGIRONGHAASRRLLGMDVXGKOLGMEFYAITLLFLLWS 300
 QY 301 PYTVACYMRFVYKACAVPHRYLATAVMGSFAQAAVNPVYCFLLNKDKCLTTHAPCWGT 360
 DB 301 PYTVACYMRFVYKACAVPHRYLATAVMGSFAQAAVNPVYCFLLNKDKCLTTHAPCWGT 360
 QY 361 GGAPAPREPCVM 373
 DB 361 GGAPAPREPCVM 373
 RESULT 12
 ADG12836
 ID ADG12836 standard; protein; 373 AA.
 XX ADG12836;
 AC 26-FEB-2004 (first entry)
 DT 26-FEB-2004 (first entry)
 XX Human wild-type hSREB3 amino acid sequence SEQ ID NO:59.
 DE G protein coupled receptor; GPCR;
 KM G protein coupled receptor internalisation; arrestin;
 KM G protein coupled receptor kinase; GRK; modified GRK; cardiant;
 KM cardiovascular; hypotensive; antiarteriosclerotic; nephrotropic;
 KM antidiabetic; antiasthmatic; respiratory; antiinflammatory; antiallergic;
 KM antihemetic; antiarrhythmic; gastrointestinal; antidepressant;
 KM analgesic; anorectic; antiparkinsonian; nootropic; neuroprotective;
 KM immunosuppressive; cyostatic; G protein antagonist;
 KM aberrant GPCR desensitisation; angina pectoris; hypertension;
 KM myocardial infarction; arrhythmia; congestive heart failure;
 KM atherosclerosis; renal failure; diabetes; asthma; chronic bronchitis;
 KM rhinitis; allergy; rheumatoid arthritis; inflammatory bowel disease;
 KM gastric ulcer; pain; obesity; depression; obsessive-compulsive disorder;
 KM Parkinson's disease; Alzheimer's disease; multiple sclerosis; cancer;
 KM human.
 XX Homo sapiens.
 OS MO2003097795-A2.
 PN MO2003097795-A2.
 XX 27-NOV-2003.
 PD 12-MAY-2003; 2003WO-US014581.
 PF 13-MAY-2002; 2002US-0379986P.
 XX 07-AUG-2002; 2002US-0401698P.
 PR (NORA-) NORAK BIOSCI INC.
 PA Oakley RH, Hudson CC;
 XX MPI, 2004-022856/02.
 DR

CC diseases) and disorders of the kidney, liver, lung, breast, ovary, uterus, prostate, testis, skin, stomach, pancreas, spleen, thymus and thyroid (e.g., cancer). The present sequence represents a GPCR of the CC invention. Note: The full sequence data for this patent did not form part of the printed specification; those sequences not shown were obtained in electronic format directly from WIPO at [ftp.wipo.int/pub/published_pcr_sequences](http://wipo.int/pub/published_pcr_sequences).

XX Sequence 373 AA:

Query Match 99.7%; Score 1986; DB 8; Length 373;
Best Local Similarity 99.7%; Pred. No. 3e-217;
Matches 372; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MANTGEPREVSAGALSPSPASAYVKLVGLIMCVSLAGNALISLVTKERALHKAPYF 60
DB 1 MANTGEPREVSAGALSPSPASAYVKLVGLIMCVSLAGNALISLVTKERALHKAPYF 60
QY 61 LLDLCIADGIRSAVCPFFYLASVRHSSWTFSAISCKIYAFMAVLFCHAAFMFLFCISVT 120
DB 61 LLDLCIADGIRSAVCPFFYLASVRHSSWTFSAISCKIYAFMAVLFCHAAFMFLFCISVT 120
QY 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLVSAMAPFPVFDVGTYYKFIREDQCIFEHRY 180
DB 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLVSAMAPFPVFDVGTYYKFIREDQCIFEHRY 180
QY 181 FXANDTLGFMMLAVMAATHAVYGLLFEYRHRMKVQVWPALISQWTFHGPATQ 240
DB 181 FXANDTLGFMMLAVMAATHAVYGLLFEYRHRMKVQVWPALISQWTFHGPATQ 240
QY 241 AAANWAGRGSRMPPTLLGIRONGHAAARRLLGMDVGEKOLGMPFAITLLFLLWS 300
DB 241 AAANWAGRGSRMPPTLLGIRONGHAAARRLLGMDVGEKOLGMPFAITLLFLLWS 300
QY 301 PYIVACYWVFYKACAVPHRYLATAVWMSFAQAAVNPVFCFLNKDLKKCLTTHAPCWGT 360
DB 301 PYIVACYWVFYKACAVPHRYLATAVWMSFAQAAVNPVFCFLNKDLKKCLTTHAPCWGT 360
QY 361 GGAPAPREPYCWM 373
DB 361 GGAPAPREPYCWM 373

RESULT 14

AE8B7475 standard; protein; 373 AA.

XX AE8B7475;

DT 20-OCT-2005 (first entry)

XX G protein coupled receptor, SREB3.

XX Cardiovascular-Gen.; Cytostatic; Endocrine-Gen.; Antianemic;
XX Respiratory-Gen.; Neuroprotective; Gynecological; Nootropic;
XX Antiasthmatic; Hypotensive; Anticancer; Cardiac; Antiallergic;
XX Neuroleptic; Muscular-Gen.; Antidepressant;
XX G protein coupled receptor inhibitor;
XX G protein coupled receptor activator; SREB3; diagnosis;
XX Cardiovascular disease; Endocrine disease; Genitourinary disease;
XX Andrology; Gynecology and obstetrics; Hematological disease;
XX Metabolic disorder; Neoplasia; Neurological disease; Respiratory disease.

XX Homo sapiens.

OS Key Location/Qualifiers

FT Misc-difference 146 /note- "Encoded by ACG"

XX WO2005075991-A1.

XX 18-AUG-2005.

PF 26-JAN-2005; 2005WO-EP000721.
XX
PR 04-FEB-2004; 2004EP-00002394.
XX

PA (FARB) BAYER HEALTHCARE AG.

PI Golz S, Brueggemeier U, Geerts A, Summer H, Thiele R;

DR MPI: 2005-591680/60.

XX N-PSDB; AE8B7474.

PT Screening for therapeutic agents useful for treating e.g. cardiovascular disease involves contacting test compound with seven transmembrane G protein coupled receptor; and detecting binding of the test compound with the receptor.

PS disclosure, SEQ ID NO 2; 105bp; English.

XX The invention relates to a method of screening for therapeutic agents useful in the treatment of e.g. cardiovascular disease, endocrinological disease and neurological disease, comprising contacting a test compound with G protein coupled receptor SREB3 polypeptide. The method is useful for screening, diagnosing or treating cardiovascular disease, cancer, endocrinological disease, metabolic disease, hematological disease, respiratory disease, neurological disease, urological disease or reproduction disease in mammals. Also useful for treating hypertension, ulcer, myocardial infarction, asthma, allergies, depression, schizophrenia, dyskinetia, delirium and dementia. The method provides the screening of an agent for the treatment of a wide variety of diseases including cardiovascular disease, cancer, endocrinological disease, metabolic disease, hematological disease, urological disease, or reproduction disease, by detecting the binding and/or activity with a G protein coupled receptor, SREB3 that is highly expressed in various brain tissues. The present sequence represents the amino acid sequence of the G protein coupled receptor, SREB3.

XX Sequence 373 AA;

Query Match 99.7%; Score 1986; DB 9; Length 373;

Best Local Similarity 99.7%; Pred. No. 3e-217;
Matches 372; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MANTGEPREVSAGALSPSPASAYVKLVGLIMCVSLAGNALISLVTKERALHKAPYF 60
DB 1 MANTGEPREVSAGALSPSPASAYVKLVGLIMCVSLAGNALISLVTKERALHKAPYF 60
QY 61 LLDLCIADGIRSAVCPFFYLASVRHSSWTFSAISCKIYAFMAVLFCHAAFMFLFCISVT 120
DB 61 LLDLCIADGIRSAVCPFFYLASVRHSSWTFSAISCKIYAFMAVLFCHAAFMFLFCISVT 120
QY 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLVSAMAPFPVFDVGTYYKFIREDQCIFEHRY 180
DB 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLVSAMAPFPVFDVGTYYKFIREDQCIFEHRY 180
QY 181 FXANDTLGFMMLAVMAATHAVYGLLFEYRHRMKVQVWPALISQWTFHGPATQ 240
DB 181 FXANDTLGFMMLAVMAATHAVYGLLFEYRHRMKVQVWPALISQWTFHGPATQ 240
QY 241 AAANWAGRGSRMPPTLLGIRONGHAAARRLLGMDVGEKOLGMPFAITLLFLLWS 300
DB 241 AAANWAGRGSRMPPTLLGIRONGHAAARRLLGMDVGEKOLGMPFAITLLFLLWS 300
QY 301 PYIVACYWVFYKACAVPHRYLATAVWMSFAQAAVNPVFCFLNKDLKKCLTTHAPCWGT 360
DB 301 PYIVACYWVFYKACAVPHRYLATAVWMSFAQAAVNPVFCFLNKDLKKCLTTHAPCWGT 360
QY 361 GGAPAPREPYCWM 373
DB 361 GGAPAPREPYCWM 373

RESULT 15

AA099953
ID AA09953 standard; protein; 378 AA.
XX
AC AA09953;
XX
DT 04-JAN-2002 (first entry)
XX
DE Human expressed polypeptide SEQ ID NO 77.
XX
KW Human; nocrotropic; neuroprotective; cytostatic; dermatological; virucide;
KW immunosuppressive; anti-inflammatory; anti-HIV; antibacterial; vulnery;
KW antiparisonian; antisliding; antianaemic; antiahrilic; cancer;
KW antihemetic; hepatotropic; cerebroprotective; antiinflammatory;
KW antiallergic; antidiabetic; antilucer; anticonvulsant; antifungal;
KW antiparasitic; cardiac; immune disorder; cardiovascular disorder;
KW neurological disease; infection; nephrotropic; gene therapy; vaccine.
XX
OS Homo sapiens.
XX
PN WO20015387-A1.
XX
PD 02-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US01310.
XX
PR 31-JAN-2000; 2000US-0179065P.
-PR 04-FEB-2000; 2000US-0180628P.
PR 24-FEB-2000; 2000US-0184664P.
PR 02-MAR-2000; 2000US-0186350P.
PR 16-MAR-2000; 2000US-0189874P.
PR 17-MAR-2000; 2000US-0190076P.
-PR 18-APR-2000; 2000US-0198123P.
PR 19-MAY-2000; 2000US-0205515P.
PR 07-JUN-2000; 2000US-0209467P.
PR 28-JUN-2000; 2000US-0214886P.
PR 30-JUN-2000; 2000US-0215135P.
PR 07-JUL-2000; 2000US-0216647P.
PR 07-JUL-2000; 2000US-0216880P.
PR 11-JUL-2000; 2000US-0217487P.
PR 11-JUL-2000; 2000US-0217496P.
PR 14-JUL-2000; 2000US-0218290P.
PR 26-JUL-2000; 2000US-0220963P.
PR 26-JUL-2000; 2000US-0220964P.
PR 14-AUG-2000; 2000US-0224518P.
PR 14-AUG-2000; 2000US-0224519P.
PR 14-AUG-2000; 2000US-0225213P.
PR 14-AUG-2000; 2000US-0225214P.
PR 14-AUG-2000; 2000US-0225266P.
PR 14-AUG-2000; 2000US-0225267P.
PR 14-AUG-2000; 2000US-0225268P.
PR 14-AUG-2000; 2000US-0225270P.
PR 14-AUG-2000; 2000US-0225447P.
PR 14-AUG-2000; 2000US-0225757P.
PR 14-AUG-2000; 2000US-0225758P.
PR 14-AUG-2000; 2000US-0225759P.
PR 18-AUG-2000; 2000US-0226279P.
PR 22-AUG-2000; 2000US-0226681P.
PR 22-AUG-2000; 2000US-0226686P.
PR 22-AUG-2000; 2000US-0227182P.
PR 23-AUG-2000; 2000US-0227009P.
PR 30-AUG-2000; 2000US-0228924P.
PR 01-SEP-2000; 2000US-0229287P.
PR 01-SEP-2000; 2000US-0229343P.
PR 01-SEP-2000; 2000US-0229344P.
PR 01-SEP-2000; 2000US-0229345P.
PR 05-SEP-2000; 2000US-0229509P.
PR 05-SEP-2000; 2000US-0229513P.
PR 06-SEP-2000; 2000US-0230437P.
PR 06-SEP-2000; 2000US-0230438P.
PR 08-SEP-2000; 2000US-0231242P.
PR 08-SEP-2000; 2000US-0231243P.
PR 08-SEP-2000; 2000US-0231244P.
PR 08-SEP-2000; 2000US-0231413P.

PR 08-SEP-2000; 2000US-0231414P.
PR 08-SEP-2000; 2000US-0232080P.
PR 08-SEP-2000; 2000US-0232081P.
PR 12-SEP-2000; 2000US-0231968P.
PR 14-SEP-2000; 2000US-0232397P.
PR 14-SEP-2000; 2000US-0232398P.
PR 14-SEP-2000; 2000US-0232399P.
PR 14-SEP-2000; 2000US-0232400P.
PR 14-SEP-2000; 2000US-0232401P.
PR 14-SEP-2000; 2000US-0233063P.
PR 14-SEP-2000; 2000US-0233064P.
PR 14-SEP-2000; 2000US-0233065P.
PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235494P.
PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235836P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 02-OCT-2000; 2000US-0239335P.
PR 13-OCT-2000; 2000US-0239337P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246529P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.
PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.
PR 17-NOV-2000; 2000US-0249209P.
PR 17-NOV-2000; 2000US-0249210P.
PR 17-NOV-2000; 2000US-0249211P.
PR 17-NOV-2000; 2000US-0249212P.
PR 17-NOV-2000; 2000US-0249213P.
PR 17-NOV-2000; 2000US-0249214P.
PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249246P.
PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.

PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
XX (HUMA-) HUMAN GENOME SCI INC.
XX
XX
XX Rosen CA, Barash SC, Ruben SM;
XX
XX MPI: 2001-465573/50.
XX N-PSDB; AAI99565.
XX
XX
XX Isolated digestive system associated polypeptide for treating, preventing
XX and/or prognosing disorders related to the digestive system including
XX digestive system cancers and also for testing and detection e.g.
XX diagnosis.
XX
XX
XX Claim 11; SEQ ID NO 77; 509pp + Sequence Listing; English.
XX
XX
XX The invention relates to novel genes (AAI99548-AAI99604) and proteins
XX (AAI99936-AAI99984) useful for preventing, treating or ameliorating
XX medical conditions e.g. by protein or gene therapy. The genes are
XX isolated from a range of human tissues disclosed in the specification.
XX The nucleic acids, proteins, antibodies and (ant)agonists are useful in
XX the diagnosis, treatment and prevention of: (a) cancer, e.g. breast and
XX ovarian cancer and other cancers of the adrenal gland, bone, bone marrow,
XX breast, gastrointestinal tract, liver, lung, or urogenital; (b) immune
XX disorders e.g. Addison's disease, allergies, autoimmune haemolytic
XX anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's disease,
XX multiple sclerosis, rheumatoid arthritis and ulcerative colitis; (c)
XX cardiovascular disorders such as myocardial ischaemias; (d) wound healing
XX; (e) neurological diseases e.g. cerebral anoxia and epilepsy; and (f)
XX infectious diseases such as viral, bacterial, fungal and parasitic
XX infections. Note: The sequence data for this patent did not form part of
XX the printed specification, but was obtained in electronic format directly
XX from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
XX
XX Sequence 378 AA:
SQ
Query Match 99.7%; Score 1986; DB 4; Length 378;
Best Local Similarity 99.7%; Pred. No. 3e-217;
Matches 372; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 MANTGEPPEVSALSPSPASAYVKLVGLIMCVSLAGNAIISLVLKERALHKAPYF 60
DB 6 MANTGEPPEVSALSPSPASAYVKLVGLIMCVSLAGNAIISLVLKERALHKAPYF 65
QY 61 LLDLCLADGIRSAVCEPFVLASVRHGSMTFSALSCRIVAFMAVLFCFHAFMLFCISVT 120
DB 66 LLDLCLADGIRSAVCEPFVLASVRHGSMTFSALSCRIVAFMAVLFCFHAFMLFCISVT 125
QY 121 RYVAIAHHRFYAKRMTLMTCAVIMCMAWTLISVMAAPPPVDVGTYKFIREDOCIFEHRY 185
DB 126 RYVAIAHHRFYAKRMTLMTCAVIMCMAWTLISVMAAPPPVDVGTYKFIREDOCIFEHRY 185
QY 181 FKANDTLGFMLAMVMAATHAAYYKLLPEYRHRKKKPVQVM/PAISQNTFHPGATGQ 240
DB 186 FKANDTLGFMLAMVMAATHAAYYKLLPEYRHRKKKPVQVM/PAISQNTFHPGATGQ 245
QY 241 AAANWLAGFGGMPPTLLGIRONGHAASRRLGMDVKGKQJGRMFYAITLLFLLWS 300
DB 246 AAANWLAGFGGMPPTLLGIRONGHAASRRLGMDVKGKQJGRMFYAITLLFLLWS 305

QY 301 PYIVACYMREVFVAKACAVPHRYLATAVWMSFAQAAVNPVCFELINKDKKCLTTHAPCMGT 360
DB 306 PYIVACYMREVFVAKACAVPHRYLATAVWMSFAQAAVNPVCFELINKDKKCLTTHAPCMGT 365
QY 361 GGAPADREPYCVM 373
DB 366 GGAPADREPYCVM 378

Search completed: March 7, 2006, 12:50:16
Job time : 188 secs

THIS PAGE BLANK (USPTO)

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioceleration Ltd.

OM protein - protein search, using sw model

Run on: March 7, 2006, 12:50:34 ; Search time 40 Seconds

(without alignments)
897.221 Million cell updates/sec

Title: US-10-782-596-20

Perfect score: 1992
Sequence: 1 MANTGEPREVSAGALSPPSA.....HAPCWGTGAPAPREPYCWM 373

Scoring table:

BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database :
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1986	99.7	373	2 JC7289	G-protein coupled
2	1288.5	64.7	370	2 T47131	G-protein coupled
3	1031	51.8	375	2 JC7287	G-protein coupled
4	264	13.3	387	2 I49246	D4 dopamine recept
5	260	13.1	400	2 G01977	d3 dopamine recept
6	259.5	13.0	449	2 S02011	serotonin receptor
7	259.5	13.0	471	2 S11280	serotonin receptor
8	259.5	13.0	471	2 S40889	5-hydroxytryptamin
9	257	12.9	471	2 A43956	serotonin receptor
10	256.5	12.9	471	2 A34863	serotonin receptor
11	256	12.9	400	2 G00013	serotonin receptor
12	250.5	12.6	453	2 S32817	D3 dopamine recept
13	247.5	12.4	387	1 DYNHDA	gasirin receptor -
14	247	12.4	452	2 JC2459	dopamine receptor
15	244	12.2	448	2 S36402	gasirin/cholecysto
16	243.5	12.2	447	2 A47430	gasirin/cholecysto
17	243	12.2	448	2 A47519	serotonin receptor
18	241.5	12.1	450	2 B40392	alpha-2-adrenergic
19	238.5	12.0	450	2 A34169	alpha-2-adrenergic
20	237	11.9	446	1 DYTID3	dopamine receptor
21	237	11.9	477	2 S71323	alpha-1A adrenergi
22	236	11.8	481	2 S49442	serotonin receptor
23	236	11.8	481	2 S43687	serotonin receptor
24	236	11.8	481	2 A25896	beta-adrenergic re
25	235	11.8	445	2 A48881	serotonin receptor
26	234	11.7	446	2 I48322	dopamine receptor
27	233	11.7	446	2 S68423	serotonin receptor
28	232	11.6	460	2 A32605	serotonin receptor
29	231.5	11.6	458	2 JS0616	serotonin receptor

30	231.5	11.6	464	2 S12591	beta-1-adrenergic
31	231	11.6	466	2 S36794	beta-1-adrenergic
32	230	11.5	461	2 A31237	alpha-2C-adrenergi
33	228.5	11.5	428	2 JN0692	cholecystokinin ty
34	228	11.4	422	2 I38209	serotonin receptor
35	226.5	11.4	430	2 I51898	cholecystokinin A
36	226.5	11.4	436	2 JC5599	cholecystokinin-A
37	226.5	11.4	450	2 A38316	alpha-2-adrenergic
38	226	11.3	450	2 JQ1614	gasirin receptor -
39	225.5	11.3	450	2 I49481	alpha-2-adrenergic
40	225.5	11.3	477	1 ORHDB1	beta-1-adrenergic
41	225	11.3	683	2 T37240	serotonin receptor
42	224.5	11.3	366	2 A47321	serotonin receptor
43	224.5	11.3	459	2 A43951	serotonin receptor
44	224	11.2	379	2 JC6178	serotonin receptor
45	224	11.2	504	2 A41783	tachykinin recepto

ALIGNMENTS

RESULT 1

JC7289
G-protein coupled receptor, SREB3 - human
C/Species: Homo sapiens (man)
C/Date: 18-Aug-2000 #sequence_revision 18-Aug-2000 #ext_change 09-Jul-2004
C/Accession: JC7289
R;Matsumoto, M.; Saito, T.; Takasaki, J.; Kamohara, M.; Sugimoto, T.; Kobayashi, M.; Tak
Biochem. Biophys. Res. Commun. 272, 576-582, 2000
A/Title: An evolutionarily conserved G-protein coupled receptor family, SREB, expressed
A/Reference number: JC7287
A/Accession: JC7289
A/Molecule type: mRNA
A/Residues: 1-373 <MAT>
A/Cross-references: UNIPROT:Q9NS66; UNIPARC:UPI0000050480; DDBJ:AB040799
C/Genetics:
A/Gene: sre3
A/Map position: Xp11
A/Superfamily: endothelin receptor B
C/Keywords: brain; G protein-coupled receptor; glycolysis; reproduction; transmembrane]

Query Match	99.7%	Score 1986	DB 2	Length 373
Best Local Similarity	99.7%	Pred. No. 8.1e-174		
Matches 372	Conservative	0	Mismatches 1	Indels 0
Gaps				0
QY	1 MANTGEPREVSAGALSPPSAAYVVLGLIMCVSLAGNALISLVKERALHKAPYYF	60		
DB	1 MANTGEPREVSAGALSPPSAAYVVLGLIMCVSLAGNALISLVKERALHKAPYYF	60		
QY	61 LIDLCLADGIRSAVCPFFVLASVRHGSWTFSSALSKIYAFMAVLECFHAAFWLFCISVT	120		
DB	61 LIDLCLADGIRSAVCPFFVLASVRHGSWTFSSALSKIYAFMAVLECFHAAFWLFCISVT	120		
QY	121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLISVMAAPPVFDVGYKFIREDQCIFEHRY	180		
DB	121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLISVMAAPPVFDVGYKFIREDQCIFEHRY	180		
QY	181 FRANDTIGFMILAVLMAATHAVYGLLFEYRHRMKRVQVPAISQWTHGPATQO	240		
DB	181 FRANDTIGFMILAVLMAATHAVYGLLFEYRHRMKRVQVPAISQWTHGPATQO	240		
QY	241 AAANWTAGRGPMPTLLGIRONGHARSRLIGMDEVGKQIGMFAITLLFFLLWS	300		
DB	241 AAANWTAGRGPMPTLLGIRONGHARSRLIGMDEVGKQIGMFAITLLFFLLWS	300		
QY	301 PTVACWYRVFKACAVPHRYLATAVWMSFAQAAVNPVLCFLINKDKKCLTTTHAPCWGT	360		
DB	301 PTVACWYRVFKACAVPHRYLATAVWMSFAQAAVNPVLCFLINKDKKCLTTTHAPCWGT	360		
QY	361 GGAPAPREPYCWM 373			
DB	361 GGAPAPREPYCWM 373			

RESULT 2

G-protein coupled receptor, SREB2 - human

T47131

C:Species: Homo sapiens (man)

C>Date: 20-Apr-2000 #sequence_revision 20-Apr-2000 #text_change 09-Jul-2004

C:Accession: T47131, JG7288

R:Pouletka, A.; Wellenreuther, R.; Mewes, H.W.; Well, B.; Wiemann, S.

submitted to the Protein Sequence Database, March 2000

A:Reference number: Z24374

A:Accession: T47131

A:Status: preliminary

A:Molecule type: mRNA

A:Residues: 1-370 <AAA>

A:Cross-references: UNIPROT: P60993; UNIPARC: UP10000004048; EMBL: AL161959; NID: g7328012;

A:Experimental source: adult amygdala; clone DKFZ6761108121

R:Natsumoto, M.; Saito, T.; Takasaki, J.; Kamohara, M.; Sugimoto, T.; Kobayashi, M.; Tad

Biochem. Biophys. Res. Commun. 272, 576-582, 2000

A:Title: An evolutionarily conserved G-protein coupled receptor family, SREB, expressed

A:Reference number: JG7287

A:Accession: JG7288

A:Molecule type: mRNA

A:Residues: 1-370 <MAT>

A:Cross-references: UNIPARC: UP10000004048; DDBJ: AB040799

C:Genetics:

A:Gene: srebb2

A:Map position: 7q31

A:Note: DKFZ6761108121.1

C:Keywords: Brain; G protein-coupled receptor; glycolysis; reproduction; transmembrane p

Query Match 64.7%; Score 1288.5; DB 2; Length 370;

Best Local Similarity 62.7%; Pred. No. 4.6e-110;

Matches 225; Conservative 56; Mismatches 77; Indels 7; Gaps 4;

QY 1 MANTGPEPEVSGALSPPSASAYVKLVLLGLIMCVSLAGNALSLVLKERALHKAPYF 60

DB 1 MANTSHAADNIQNLSP--LTAFELKLTSLGFIIGSVGNLISILVVDKTLHRAPIYF 58

QY 61 LLDLCLADGIRSAVCEPFLVAVRHGSSWTFSSALCKIVAFMAVLCFPAAFMLFCISVT 120

DB 59 LLDLCCSDILRSATCEPFLVAVRHGSSWTFSSALCKIVAFMAVLCFPAAFMLFCISVT 118

QY 121 RYMAIAHRRFYAKRMTLMTCAAVICMAWTLSSVMAFPPEVDGTYKFIREDQCIFEHY 180

DB 119 RYLAIAHRRFYTKRLTFWICLAVICWMTLSVMAFPPEVDGTYKFIREDQCIFQHS 178

QY 181 FKANDTLGFMLAVLMAATHAVYKLLFEYRHRKMKPVQVPAISQWTFHGPATGQ 240

DB 179 FRANDSLGFMLLALILATLQVLYLKLIFVHRRKMKPVQFVAASQWTFHGPASGQ 238

QY 241 AAANWTAGRGMPPTLLGIRONGHAAS--RLILGMDVEVGEKOLGRMFAITLLFLM 299

DB 239 AAANWLAGRGMPPTLLGIRONANTGRRLLVDEFMERKISRMFTIMTFLFLM 298

QY 300 SPPIVACVYMFVKACAVPHRYLATAVMNSFAQAAVPIFCILNKDKLCTTTHAPCW 358

DB 299 GPPIVACVYMFVKACAVPHRYLATAVMNSFAQAAVPIFCISNELRRCFSTILLYC 357

QY 359 GTGAPAPREPPYCW 373

DB 358 --RKSRLPREPPYCVI 370

QY

DB

QY

DB

QY

DB

QY

DB

QY

DB

QY

DB

QY

DB

QY

DB

QY

DB

QY

DB

QY

DB

QY

DB

QY

DB

QY

DB

QY

DB

QY

DB

QY

DB

QY

DB

QY

A:Accession: JG7287
A:Molecule type: mRNA
A:Residues: 1-375 <MAT>
A:Cross-references: UNIPROT: Q9NS67; UNIPARC: UP10000049802; DDBJ: AB040799
C:Genetics:
A:Gene: srebb1
A:Map position: 3p21-14
C:Keywords: Brain; glycolysis; reproduction; transmembrane protein

Query Match 51.8%; Score 1031; DB 2; Length 375;
Best Local Similarity 54.1%; Pred. No. 1.6e-86;
Matches 196; Conservative 62; Mismatches 92; Indels 12; Gaps 5;

QY 1 MANTGPEPEVSGALSPPSASAYVKLVLLGLIMCVSLAGNALSLVLKERALHKAPYF 60
DB 1 MANTSHAADNIQNLSP--LTAFELKLTSLGFIIGSVGNLISILVVDKTLHRAPIYF 58

QY 61 LLDLCLADGIRSAVCEPFLVAVRHGSSWTFSSALCKIVAFMAVLCFPAAFMLFCISVT 117
DB 57 LLDLCLADGIRSAVCEPFLVAVRHGSSWTFSSALCKIVAFMAVLCFPAAFMLFCISVT 116

QY 118 SVTRYMAIAHRRFYAKRMTLMTCAAVICMAWTLSSVMAFPPEVDGTYKFIREDQCIF 176
DB 117 GYTRYMAIAHRRFYAKRMTLMTCAAVICMAWTLSSVMAFPPEVDGTYKFIREDQCIF 173

QY 177 EHRVFRANDTLGFMLAVLMAATHAVYKLLFEYRHRKMKPVQVPAISQWTFHGPATG 236
DB 174 EGRPDGAPGALGFLLAVVAGATHLVYRLFFIHDRKMKPARLVPAVSHDWTFHGPATG 233

QY 237 ANGOAANWTAGRGMPPTLLGIRONGHA--ASRLILGMDVEVGEKOLGRMFAITLLFLM 295
DB 234 ANGOAANWTAGRGMPPTLLGIRONGHA--ASRLILGMDVEVGEKOLGRMFAITLLFLM 293

QY 296 LLLMSPIVACVYMFVKACAVPHRYLATAVMNSFAQAAVPIFCILNKDKLCTTTHAPCW 355
DB 294 LLLMSPIVACVYMFVKACAVPHRYLATAVMNSFAQAAVPIFCILNKDKLCTTTHAPCW 353

QY 356 PC 357
DB 354 PC 355

RESULT 4
I49246
D4 dopamine receptor - mouse
C:Species: Mus musculus (house mouse)
C>Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 09-Jul-2004
C:Accession: I49246
R:Fishburn, C.S.; Carmon, S.; Fuchs, S.
FEBS Lett. 361, 215-219, 1995
A:Title: Molecular cloning and characterisation of the gene encoding the murine D4 dopa-
A:Reference number: I49246; MUID:95212551; PMID:7698326
A:Accession: I49246
A:Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 1-387 <RES>
A:Cross-references: UNIPROT: P51436; UNIPARC: UP10000000883; EMBL: U19880; NID: g758426; PI
C:Superfamily: vertebrate rhodopsin
C:Keywords: neurotransmitter receptor

Query Match 13.3%; Score 264; DB 2; Length 387;
Best Local Similarity 24.8%; Pred. No. 2.2e-16;
Matches 96; Conservative 61; Mismatches 156; Indels 74; Gaps 14;

QY 8 PERV-SGA-LSPPSASAYV-KLVLLGLIMCVSLAGNALSLVLKERALHKAPYFLLD 64
DB 18 PERV-SGA-LSPPSASAYV-KLVLLGLIMCVSLAGNALSLVLKERALHKAPYFLLD 64

QY 65 CLADGIRSAVCEPFLVAVRHGSSWTFSSALCKIVAFMAVLCFPAAFMLFCISVTRYMA 124
DB 74 AAADLLAVLVPLFYSEVGGVWLLSRLCDTMAAMVMTCTASIFNLCASVDRFVA 133

QY 125 IAHRRFYAKRMTLMTCAAVICMA-WTLSSVMAFPPEVDGTYKFIREDQCIFEHY-YFK 182

Db 134 VYVPLRYNQ---GCGQLLLIAATWLSAAVASPVVCGINDVPG--RDPAVCGLENNRYV 169

Qy 183 ANDTLGMILMLAVLMAATHAVYGLKLLFE-YHRRCK-----KPYQVPAISQWTHGCP 235

Db 190 YSSVCSFPEPCPLMTLLYWATFEGRLRWMAAHTKLHSAPARP-----SGP 236

Qy 236 GATGQAAANWVIAGFGGPM-----PPTLLGIR-----262

Db 237 GPP-----VSDPTGGPFPPDCPPLPLRTSPDSRSRPEGELSGRCPGCLLADAL 288

Qy 263 +ONGHAASRRLLGMDVEKSGKOLGRMFVAITLLFLLMSPYVACVYMFVFKACAVDHRV 321

Db 290 PQPEPSSRRRRRAKKTGRERKAMRMLPVVGAFLVCTPPFVVAITLALCPACFVSPRL 349

Qy 322 LATAVWMSFQAQAAVNPVIVCFLLKDKL 348

Db 350 VSAVTMLGYNVSNALNPILYITTFIAEER 376

```

RESULT 5
G01977
d3 dopamine receptor - human
C:Species: Homo sapiens (man)
C:Date: 21-Dec-1996 #sequence_revision 06-Jun-1997 #text_change 09-Jul-2004
C:Accession: G01977
R:Fishburn, C.S.; Park, B.
submitted to the EMBL Data Library, July 1995
A:Reference number: G08971
A:Accession: G01977
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-400 <Fis>
A:Cross-references: UNIPROT:P35462; UNIPARC:UPI000002CQFB; EMBL:U32499; NID:G927341; PIR:
C:Superfamily: vertebrate rhodopsin

- Query Match 13.1%; Score 260; DB 2; Length 400;
Best Local Similarity 23.6%; Pred. No. 5.3e-16;
Matches 94; Conservative 71; Mismatches 180; Indels 54; Gaps 14;

QY 3 NTTGEPEVSGALSPPSASATYKVLVLGLMNCVSLAGNALLSLVTKERALHKAPYFL 62
Db 12 NYTGAENSTGA-SQARPHAYALSYCALILAI-VFGNGLVCMVTLKERALLQTNTYLV 69
QY 63 DCLADIGRSVCPPEVLAASVRHGSSWTFESALSCIKVAFMAVLFCFHAFLFCISVTRY 122
Db 70 SLAVADLLVATLVMPWVYILEVTGGMNFSKICDVFYLDVMNCTASILNLCALSIDRY 129
QY 123 MAI--AHREYAKMTLMTCAAVICMAMTLSVMAAPPEVDVGYKFIREDQCIEHR 179
Db 130 TAVVMPVHYHGHTGQSSCRVALMITAVWLAFVAVSCFLGEMT---TGDPTVCISINP 186
QY 180 YFKA-NDTLGFMMLALVMAATHAVYKGL-LLFERYHRK-----MKP----- 219
Db 187 DFVIYSSVVSFYLPFGV----TVLVYARIYVVLKQRRKRLILTRONSGNSVSRBGPQOT 242
QY 220 -----VGMVPAISONMTFHGPGATGGAAMNIAFGRGPMPTL-----IGIRO-- 263
Db 243 LSPDPAHLELKRYYISICODTLGCGFGEORGEGLKREKTKNSLSPTIAPKLSLEVRKLS 302
QY 264 NGAHASRRLGMDVEYKG-----EKOLGRMFVYATITLLFLLMSPYIVACYRWVFAACAV-P 318
Db 303 NGRISTSLKGLPDRGVFLREKKATQWVALVLAFAFYICMLPFLTHVLNTHCQCHVSP 362
QY 319 HRYLATAVMSFQAQAAVNPVYICFLNKLKCLKCLTTHAFC 357
Db 363 ELYSAT-TWLGVNSALNPVIYITFNIEFRKAFKLIIISC 400

RESULT 6
S02011
serotonan receptor 2 - rat
;Alternate names: 5-hydroxytryptamine receptor 2 (5-HT2)

```

C:Species: *Rattus norvegicus* (Norway rat)
C:Date: 01-Dec-1989 #sequence_revision 01-Dec-1989 #next_change 09-Jul-2004
C:Accession: S02011
R:Pritchett, D.B.; Bech, A.W.V.; Wozny, M.; Taleb, O.; Dal Toso, R.; Shih, J.C.; Seeburg
EMBO J. 7, 4135-4140, 1988
A>Title: Structure and functional expression of cloned rat serotonin 5HT-2 receptor.
A:Reference number: S02011, MUID:99210797; PMID:2854054
A:Accession: S02011
A:Molecule type: mRNA
A:Residues: 1-449 <PRI>
A:Cross-references: UNIPROT:P14842; UNIPARC:UP1000017082C; EMBL:X13971; NID:957855; PIDD
C:Superfamily: vertebrate rhodopsin
C:Keywords: G protein-coupled receptor; transmembrane protein

Query Match	13.0%;	Score 259.5;	DB 2;	Length 449;
Best Local Similarity	24.4%;	Pred. No. 6,7e-16;		
Matches 90;	Conservative 66;	Mismatches 150;	Indels 61;	Gaps 14;

```

Oy 17 PPSASAVYKL-----VLGLIMCVSLAGNAIISLVLKERALHKAAPYFLDCLADG 69
Db 40 PPTCLSIILHDEKXMSALLTTVIILITLGNILVIMANVSEKLOKQATNYFLMSLAIAM 99
Oy 70 IRSAVCFEPVLASVHGGSWTFPSALCKIVAFMAVLFCGHAFMLFCISVTRYMAIA--- 126
Db 100 LLGFLVMEVSMULTILYGRMPLPSKCIAMIYLDLFTSAISIMHCAISLDREYVALONBI 159
Oy 127 -HHRFYAKRMLTMLTCIAVICMAWTLVSMAAPF-PVEDGTGYFIRBEDCICF-EHRFYKA 183
Db 160 HHSFNSRSTKAEKLIIAV---MTISVGISMBIPVFGLODQSKVREKSGCLLADDFVLI 215
Oy 184 NDTLGFMMLAVLMAATAVYKGLLTFE-----YHRKKKPVQMVN--AISQWTFH 233
Db 216 GSPFAFPLPLTI-WYITVFLTIKLSQKENTLCSVDSLSTRAKLASFPLQSSLSSEKLF- 273
Oy 234 GPGATGQAAANWIAIGFGRGMPPTLLGIRONGHAASRLLG--MDEVKGEKOLGRMEFYAI 291
Db 274 -----QNSIH-----REPESYAGRRTMQGISNEQKACKVILGIVEF-- 308
Oy 292 TLLFLMLSPITVACVYRWFYVK-AC--AVPHRYLATAYMSAQAANVPIYCFELNKDJK 348
Db 309 --LRFVVMCCPEFITINIMAVICKESCNENVIGALLNVFVWIGILSSAVNPLVYTLFFKTYR 366
Oy 349 KCLTTHAPC 357
Db 367 SAFSRRIQC 375

```

```

RESULT 7
S11280
serotonin receptor 2 - Chinese hamster
N/Alternate names: 5-hydroxytryptamine receptor 2 (5-HT2)
C/Species: Cricetus griseus (Chinese hamster)
C/Date: 21-Nov-1993 #sequence_revision 10-Nov-1995 #text_change 09-Jul-2004
C/Accession: S11280
J/Chamhard, J.C.; van Obergeren-Schilling, E.; Haslam, R.J.; Vouret, V.; Pouyssegur, J.
Nucleic Acids Res. 18, 5282, 1990
A/Title: Chinese hamster serotonin (5-HT) type 2 receptor cDNA sequence.
A/Reference number: S11280, MUID:90384833, PMID:2402449
A/Accession: S11280
A/Status: preliminary; translation not shown
A/Status: preliminary; translation not shown
A/Molecule type: mRNA
A/Residues: 1-471 <C3A>
A/Cross-references: UNIPROT:P18599, UNIPARC:UPI0000124F2B, EMBL:X55791, NID:G49455, PIDR
C/Superfamily: vertebrate rhodopsin
C/Keywords: G protein-coupled receptor; transmembrane protein

Query Match      13.0%; Score 259.5; DB 2; Length 471;
Best Local Similarity 23.1%; Pred. NO. 7e-16;
Matches 86; Conservative 66; Mismatches 152; Indels 69; Gaps 12;

Oy 17 PPSASAVYK-----VLGLIMCVSLAGNALISLVLKERALHKRPYFLDLCAGD 69
DB 62 PPTCLSLTIOEKWMSALTRAVVILITLGIAGILVIVKVSLEKQNLQNTYFLMSIAIDM 121

```

```
QY 70 IRSACPPFVLASVHRGSSWTSFALSCKIVAFMAVLCFHAAMFCISVTRYMAIA--- 126
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 122 LIGFLVMPVSMITITIGYRNPSPKLCAMWITVDLFFSTASIMHLCALSIDRYVAIONPI 181
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 127 -HHRFYAKRMTLMTCAAVICMAWTLGVAMAF-PVPDVGTYKFIREDQCF-EHRYFKA 183
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 182 HHSRNSRSTKAPLKIIVAV---WTISVGSMPIPVFGLODDSKVFKQSGCLLADNPFVL 237
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 184 NDTLGFMLMLAVLMAATHAVYKLLFE-----YRRKMKPVQWMPAIS-----Q 228
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 238 GSFVAFPIPLTI-MWITTFITIKSIQKEXTLCSVSLSTRAKLASFSFLQSSLSBKLFQ 296
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 229 NMTFHPGPA-TGOAAMWIAFGRGPMPTLLGIRONGHAASRRLLGMDVKGKQLGRM 287
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 237 RSIHPEPGSYTGRMTQIS-----NEQKACVLTGIV 328
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 288 FYAITLLFLLMSPIYVACVWVFYKACAVPH---RYLATVAVMSFQAQVNPVCFPLN 344
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 329 PF----LFVVMWCFFITINIMAVICKESCNHVIIGALNVFWIIGYLSAVNPLVYTLFN 384
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 345 KDLKCLTTNAPC 357
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 385 KTYRSASFRTYIOQ 397
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :

.RESULT 8
S40689
5-hydroxytryptamine 2 receptor - mouse
C.Species: Mus musculus (house mouse)
C.Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 09-Jul-2004
C.Accession: S40689
R.Yang, W.; Chen, K.; Lan, N.C.; Gallaher, T.K.; Shih, J.C.
J. Neurosci. Res. 33, 196-204, 1992
A.Title: Gene structure and expression of the mouse 5-HT2 receptor.
A.Reference number: S40689; MUID:93085774; PMID:333538
A.Accession: S40689
A.Status: preliminary
A.Molecule type: mRNA
A.Residues: 1-471 <AN>
A.Cross-references: UNIPROT:P35363; UNIPARC:UPI00000040D4; EMBL:S49542; NID:9261074; PID:
A.Superfamily: vertebrate rhodopsin
C.Keywords: G protein-coupled receptor; transmembrane protein

Query Match 13.0%; Score 259.5; DB 2; Length 471;
Best Local Similarity 24.1%; Pred. No. 76-16; Mismatches 150; Indels 61; Gaps 14;
Matches 89; Conservative 69;

QY 17 PPSASAYVKL-----VLLGLIMCVSLAGNALISLVKERALHKAPYFFLLDCLADG 69
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 62 PRCISLILHQEKMSALITTVIILTIAGNLIVMAVLSKKLQNAATVYFLMSLAIADM 121
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 70 IRSACPPFVLASVHRGSSWTSFALSCKIVAFMAVLCFHAAMFCISVTRYMAIA--- 126
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 122 LIGFLVMPVSMITITIGYRNPSPKLCAMWITVDLFFSTASIMHLCALSIDRYVAIONPI 181
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 127 -HHRFYAKRMTLMTCAAVICMAWTLGVAMAF-PVPDVGTYKFIREDQCF-EHRYFKA 183
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 182 HHSRNSRSTKAPLKIIVAV---WTISVGSMPIPVFGLODDSKVFKQSGCLLADNPFVL 237
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 184 NDTLGFMLMLAVLMAATHAVYKLLFE-----YRRKMKPVQWMPAIS-----Q 228
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 238 GSFVAFPIPLTI-MWITTFITIKSIQKEXTLCSVSLSTRAKLASFSFLQSSLSBKLFQ 296
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 234 GPGATGOAAMWIAFGRGPMPTLLGIRONGHAASRRLLG-MDEVKGKQLGRMFPVAI 291
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 296 -----QRSIH-----REPSSYAGRRTWQISINSOKACKVGIYVF-- 330
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 292 TLLFLLMSPIYVACVWVFYK-AC-AVPHRLIATVAVMSFQAQVNPVCFPLNKDK 348
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 331 --LFVVMWCFFITINIMAVICKESCNHVIIGALNVFWIIGYLSAVNPLVYTLFNKTYR 388
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 349 KCLTTNAPC 357
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
```

```
DB 389 SAFSRKYIOQ 397
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :

.RESULT 9
A43956
serotonin receptor 2A - human
N.Alternate names: 5-hydroxytryptamine receptor 2A (5-HT2A)
C.Species: Homo sapiens (man)
C.Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 09-Jul-2004
C.Accession: A43956; J50615; I56514
R.Chen, K.; Yang, W.; Grimby, J.; Shih, J.C.
Brain Res. Mol. Brain Res. 14, 20-26, 1992
A.Title: The human 5-HT2 receptor is encoded by a multiple intron-exon gene.
A.Reference number: A43956; MUID:92356792; PMID:1323014
A.Accession: A43956
A.Molecule type: DNA
A.Residues: 1-471 <CHE>
A.Cross-references: UNIPROT:P28223; UNIPARC:UPI000000126E; GB:S42168; NID:g252946; PIDN:
A.Experimental source: normal lymphoblast cell line
A.Note: The authors translated the codon CCA for residue 405 as Thr and CCG for residue
A.Note: sequence extracted from NCBI backbone (NCBI:110508, NCBI:110524, NCBI:110527)
R.Saltzman, A.G.; Morse, B.; Whitman, M.M.; Ivanchenko, Y.; Jaye, M.; Felder, S.
Biochem. Biophys. Res. Commun. 181, 1469-1478, 1991
A.Title: Cloning of the human serotonin 5-HT2 and 5-HT1C receptor subtypes.
A.Reference number: J50615; MUID:92109767; PMID:1722404
A.Accession: J50615
A.Molecule type: mRNA
A.Residues: 1-471 <SAL>
A.Cross-references: UNIPARC:UPI000000126E; GB:X57830; NID:936430; PIDN:CAA40963.1; PID:g
R.Cook, E.H.
J. Neurochem. 63, 465-469, 1994
A.Title: Primary structure of the human platelet serotonin 5-HT2A receptor: identify wit
A.Reference number: I56514; MUID:94308772; PMID:8035173
A.Accession: I56514
A.Status: preliminary; translated from GB/EMBL/DBJ
A.Molecule type: mRNA
A.Residues: 1-471 <RES>
A.Cross-references: UNIPARC:UPI000000126E; GB:S71229; NID:9547295; PIDN:AAB31320.1; PID
C.Comment: This protein is associated with vascular contraction and platelet aggregation
C.Genetic:
A.Gene: GDB:HT2A; HT2
A.Cross-references: GDB:125192; OMIM:182135
A.Map position: 13q14-13q21
A.Introns: 138/1; 205/1
A.Superfamily: vertebrate rhodopsin
C.Keywords: G protein-coupled receptor; glycoprotein; neurotransmitter receptor; transm.
F./5-100/Domain: transmembrane #status predicted <TM>
F./11-132/Domain: transmembrane #status predicted <TM>
F./148-170/Domain: transmembrane #status predicted <TM>
F./192-213/Domain: transmembrane #status predicted <TM>
F./234-254/Domain: transmembrane #status predicted <TM>
F./326-346/Domain: transmembrane #status predicted <TM>
F./363-384/Domain: transmembrane #status predicted <TM>
F./38-44,51,54/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 12.9%; Score 257; DB 2; Length 471;
Best Local Similarity 23.9%; Pred. No. 1,26-15;
Matches 90; Conservative 63; Mismatches 155; Indels 68; Gaps 13;

QY 13 GALSPPSASAY-----VKLVLLGLIMCVSLAGNALISLVKERALHKAPYFFLLDCL 66
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 59 GCLSPSCSLILHQEKMSALITTVIILTIAGNLIVMAVLSKKLQNAATVYFLMSLAI 118
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 67 ADGIRSAVCFPPVLASVHRGSSWTSFALSCKIVAFMAVLCFHAAMFCISVTRYMAIA 126
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 119 ADMLGFLVMPVSMITITIGYRNPSPKLCAMWITVDLFFSTASIMHLCALSIDRYVAIO 178
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 127 ---HHRFYAKRMTLMTCAAVICMAWTLGVAMAF-PVPDVGTYKFIREDQCF-EHRY 180
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 179 NPHHSRNSRSTKAPLKIIVAV---WTISVGSMPIPVFGLODDSKVFKQSGCLLADNPF 234
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 181 FRANDTLGFMLMLAVLMAATHAVYKLLFEY-----RHRKMKPVQWMPAIS----- 227
      : : : : : : : : : : : : : : : : : : : : : : : : : : : :
```

Db 235 VILGSPVSPFPIPLTI-MVITYPLTIKSLQKATLCVSDLTRAKLASFSFLPQSSLSSEK 293
 QY 228 I-QNMTFHFGPA-TGQAAANMIMGFGGPMPTLLIGIRONGHAASRLLGMDVKEKQD 284
 Db 294 LFRQSIHRBPGSYTGRTMOSIS-----NQKCKVL 325
 QY 285 GGMFVAITLLFLMSPYIVACYWRVFK-AC--AVPHRYLATVAMWSPQAQAVNPVCE 341
 Db 326 GIYVF---LFTVMGCPFFITINIMAVICKESCNEVDYIGALLNFWIGYLSAVNPLVTT 381
 QY 342 LNKDKKCLYTHAPC 357
 Db 382 LFNKTYRSASFRTIQC 397

RESULT 10

A34863
 serotonin receptor 2 - rat
 N:Alternate names: 5-hydroxytryptamine receptor 2 (5-HT2)
 C:Species: Rattus norvegicus (Norway rat)
 C:Date: 22-Jan-1993 #sequence_revision 22-Jan-1993 #text_change 09-Jul-2004
 C:Accession: A34863, A40574
 R:Julius, D.; Huang, K.N.; Livelli, T.J.; Axel, R.; Jessell, T.M.
 Proc. Natl. Acad. Sci. U.S.A. 87, 928-932, 1990
 A:Title: The 5HT2 receptor defines a family of structurally distinct but functionally co
 A:Reference number: A34863, PMID:9018991, PMID:2300586
 A:Accession: A34863
 A:Molecule type: mRNA
 A:Residues: 1-471 <JUL>
 A:Cross-references: UNIPROT:P14842; UNIPARC:UPI00001778DF; GB:M30705
 R:Lin, J.; Chen, Y.; Kozak, C.A.; Yu, L.
 Genomics 11, 231-234, 1991
 A:Title: The 5-HT2 serotonin receptor gene Htr-2 is tightly linked to Es-10 on mouse chr
 A:Reference number: A40574, PMID:9211222, PMID:1765383
 A:Accession: A40574
 A:Molecule type: mRNA
 A:Residues: 1-309 'R', 311-471 <LIN>
 A:Cross-references: UNIPARC:UPI0000124F31; GB:M64867
 C:Superfamily: vertebrate rhodopsin
 C:Keywords: G protein-coupled receptor; glycoprotein; phosphoprotein; transmembrane prot

Query Match 12.9%; Score 256.5; DB 2; Length 471;
 Best Local Similarity 24.1%; Pred. No. 1,3e-15;
 Matches 89; Conservative 69; Mismatches 150; Indels 61; Gaps 14;

QY 17 PPSASAVYKL-----VLLGLIMCVSLAGNALISLVKERALHKAPYFLDCLADG 69
 Db 62 PPTCSILHLOEKMGALTTVVIIITLIGNILVIMAVSLKQLQANATNYFLMSLADW 121
 QY 70 INSAVCFPPVLASVRGSSWTFSALSCKIVAFMAVLPCHAAFMLEFCISVTRMAIA--- 126
 Db 122 LIGFLVMPVSMILTYGRWPLPSKLCALWIYLDVLFSTASIMHLCALISLDRAVAIONPI 181
 QY 127 -HHRFVAKMTLMTCAAVICMAWTLVAAAF-PVFDVGYYKFIREDQIF-EHRYFKA 183
 Db 182 HHSRFSKRAFLKIITAAV-----WTISVGSMPLPVGLQDSDSVFEGSGCLADNDPVL 237
 QY 184 NPTLGFMLAVLMAATHAVYGLLFE-----YRHRKMPVQVMP--AISQWTR 233
 Db 238 GSVAVAFIPLTI-MVITYPLTIKSLQKATLCVSDLTRAKLASFSFLPQSSLSSEKLF 295
 QY 234 GPGATQAAANMIMGFGGPMPTLLIGIRONGHAASRLLG--MDVYKGEKQLGRMFYAI 291
 Db 296 -----QRSIH-----RPPGSYARSKTMQSISSNOKCKGIYVF-- 330
 QY 292 TLLFLMSPYIVACYWRVFK-AC--AVPHRYLATVAMWSPQAQAVNPVCEFLNKDK 348
 Db 331 -LFTVMGCPFFITINIMAVICKESCNEVDYIGALLNFWIGYLSAVNPLVTLFNKTYR 388
 QY 349 KCLYTHAPC 357
 Db 389 SASFRTIQC 397

RESULT 11

G00013
 D3 dopamine receptor - green monkey
 C:Species: Cercopithecus aethiops (green monkey, grivet)
 C:Date: 13-Mar-1997 #sequence_revision 13-Mar-1997 #text_change 09-Jul-2004
 C:Accession: G00013
 R:Ross, P.C.
 submitted to the EMBL Data Library, February 1995
 A:Reference number: G00049
 A:Accession: G00013
 A:Status: preliminary; translated from GB/EMBL/DBJ
 A:Molecule type: mRNA
 A:Residues: 1-400 <ROSS>
 A:Cross-references: UNIPROT:P52703; UNIPARC:UPI0000128DB0; EMBL:U21307; NID:9984965; PII
 C:Superfamily: vertebrate rhodopsin
 C:Keywords: neurotransmitter receptor

Query Match 12.9%; Score 256; DB 2; Length 400;
 Best Local Similarity 23.8%; Pred. No. 1.2e-15;
 Matches 96; Conservative 69; Mismatches 175; Indels 64; Gaps 15;

QY 3 NTTGEBEVSALSPPSASAVYKLVLGLIMCVSLAGNALISLVKERALHKAPYFL 62
 Db 12 NTTCGVENSTGA-SQARPHAYALSYCALIILAI-VFNGVGVCAVAKERALQTTNYLVV 69
 QY 63 DLCLADGIRSAVCFPPVLASVRGSSWTFSALSCKIVAFMAVLPCHAAFMLEFCISVTR 122
 Db 70 SLAVADLVATLVMPVWVVLLEVTVGVWNSRVCCDVFVTLVMMCTASILNLCALISIDR 129
 QY 123 MAIAHHRFY-----AKRMTLMTCAAVICMAWTLVMAAPVFDVGTYKFIREDQC 174
 Db 130 TAVVMPVHYOHGCGSSCRVTL-----MITAVVLAFAVSCPLLGFPNT---TGPTVC 181
 QY 175 IFEHRYFKA-NDTLGFMLAVLMAATHAVYGLD-LLFYRHRK-----MKP- 219
 Db 182 SISNPFVIYSSVSVSYLPFGV---TVLVYARIVVYLKQRRKRILTRQNSQNSVRRG 237
 QY 220 -----VOMVAISQNTFHFGATGQAANMIMGFGGPMPTL-----LG 260
 Db 238 PFOQTLSPDRAHLELRKYVSIQDITLGGPGEERGELKREBERTNNSLPTIAPLSLE 297
 QY 261 IRO--NGHAASRLLGMDVKG---EKOLGRMFVAITLLFLMSPYIVACYWRVFK 314
 Db 298 VKRLSNGRISTSKLQPLDPRGVPLREKATQVAIVLGAFIYCWLPFLTHVLTNHCQ 357
 QY 315 CAV-PHRYLATVAMWSPQAQAVNPVCEFLNKDKKCLYTHAPC 357
 Db 358 CHVSPPELYSAT-TWLGYNVSNLNPVITYTFNIEFRAPFLKILISC 400

RESULT 12

S32817
 gastrin receptor - dog
 C:Species: Canis lupus familiaris (dog)
 C:Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
 C:Accession: S32817
 R:Kopin, A.S.; Lee, Y.M.; McBride, E.W.; Miller, L.J.; Lu, M.; Lin, H.Y.; Kolakowski Jr
 Proc. Natl. Acad. Sci. U.S.A. 89, 3605-3609, 1992
 A:Title: Expression cloning and characterization of the canine parietal cell gastrin re
 A:Reference number: S32817, PMID:92228835, PMID:1373504
 A:Accession: S32817
 A:Status: preliminary
 A:Molecule type: mRNA
 A:Residues: 1-453 <KOP>
 A:Cross-references: UNIPROT:P30552; UNIPARC:UPI000012B0E8; EMBL:M87834; NID:9163956; PII
 C:Superfamily: neurokinin 1 receptor
 C:Keywords: G protein-coupled receptor; transmembrane protein

Query Match 12.6%; Score 250.5; DB 2; Length 453;
 Best Local Similarity 24.8%; Pred. No. 4.5e-15;
 Matches 103; Conservative 61; Mismatches 171; Indels 81; Gaps 16;

QY 3 NTTGEPEVSGALSPPSASAYKVLVLLGLIMCVSLAGNALISLVLKERALKKAPYFLL 62
DB 36 NISCEPRIRGA-GTRELAIKRVTLVYVFLMSVGNLILVIGLSRLKLTVNAFLL 94
QY 63 DCLADGIRSAVCFPPVLASVHGGSWTFSALSCKIVAMAVLFCFHAAPMLFCISVTRY 122
DB 95 SLAVSDLLAVALCMPTLLPNLMG-TFIFGTVCRAVSYLKMGVSVSSTLSVALALERY 153
QY 123 MAIAHHRFAKMTLMTCAAVICMAWTLGVMAFP-PVF-----DVGYTFIREEDOCIFE 177
DB 154 SAICRPLQARVWQTSNARVITATWLSGLLVPPVPTAVOPAGABAL-----QCVNR 209
QY 178 HRYFKANDTLGFMML-----AVLMAATHAVYKLLFEYHRRKKPKVQMPAISQMT 231
DB 210 WPSARVQRTWSVLLILLFFVPGVMAVAVGLISRLYLGLARDE-----DSDESENV 262
QY 232 FHGPGATGQAAANWTAGFGRGMPPT-----LIGIRONGHAA-----SRRLGMD- 276
DB 263 RSGGGLRG-----GAGPGRAPRNGSCREGLAG--EDGGGCVYQLPRSRQTELESA 312
QY 277 -----EYKGEKOLGRMFYAITLLFLLMSPIYVACVWRVYKACAVH 319
DB 313 LTAPTPGGGRPPYQAKLLAKKRVMLVIVLFLCMLPLYSANTWRAPDSGA--H 370
QY 320 RYLATAV-----WMSPAQAAVNPV-CFLINKDLKCLTTTHAPCMGTGAPAPREP 369
DB 371 RALSGAPISFIIHLSIASCVNPLVYCPMHRRRQACLETGARC-----CPRRP 419

RESULT 13
-DYHND4
dopamine receptor D4 - human
C.Species: Homo sapiens (man)
C.Date: 30-Sep-1992 #sequence_revision 30-Sep-1992 #text_change 09-Jul-2004
C.Accession: S15079
R.van Tol, H.H.M.; Bunzow, J.R.; Guan, H.C.; Sunahara, R.K.; Seeman, P.; Niznik, H.B.; C
Nature 350, 610-614, 1991
A.Title: Cloning of the gene for a human dopamine D(4) receptor with high affinity for D
A.Reference number: S15079; MUID:91204054; PMID:1840645
A.Accession: S15079
A.Molecule type: DNA
A.Residues: 1-387 <VAN>
A.Cross-references: UNIPROT:P21917; UNIPARC:UPI000011F027; EMBL:X58497
C.Genetics:
A.Gene: GDB:DRD4
A.Cross-references: GDB:127782; OMIM:126452
A.Map position: 11p15.5-11p15.5
A.Introns: 95/3; 133/2; 269/2; 321/1
C.Superfamily: vertebrate rhodopsin
C.Keywords: alternative splicing; G protein-coupled receptor; glycoprotein; neurotransmit
F.34-60/Domain: transmembrane #status predicted <TM1>
F.72-66/Domain: transmembrane #status predicted <TM2>
F.110-131/Domain: transmembrane #status predicted <TM3>
F.153-174/Domain: transmembrane #status predicted <TM4>
F.192-214/Domain: transmembrane #status predicted <TM5>
F.215-314/Domain: intracellular #status predicted <INT>
F.315-339/Domain: transmembrane #status predicted <TM6>
F.349-368/Domain: transmembrane #status predicted <TM7>
F.3/Binding site: carbohydrate (asn) (covalent) #status predicted
F.108-185/Diulfide bonds: #status predicted
F.149-239/Binding site: phosphate (Thr) (covalent) #status predicted
F.297-306/Binding site: phosphate (Thr) (covalent) #status predicted

Query Match 12.4%; Score 247.5; DB 1; Length 387;
Best Local Similarity 24.0%; Pred. No. 7.1e-15;
Matches 88; Conservative 61; Mismatches 183; Indels 35; Gaps 9;

QY 6 GPEPEVSGALSPPSASAYV-KVVLGLIMCVSLAGNALISLVLKERALKKAPYFLLD 64
DB 21 GASAGASAGIAGGCAALVGGVLLIGAV-----LAGNSLVCSVATEALQTPNNSIVSL 76
QY 65 CLADGIRSAVCFPPVLASVHGGSWTFSALSCKIVAMAVLFCFHAAPMLFCISVTRYMA 124

DB 77 AAADLLALLVLPLFVYEEVGGAMLLSPRLCDALMADWMLCTASINLCAISVDRFA 136
QY 125 IA-----HRYFKAKMTLMTCAAVICMAWTLGVMAFP-PVFVDTGYTFIREEDOCIFEHR- 179
DB 137 VAVPLRYNRQGGSRQL-----LILGATWLSAAVAAPVLGANDVRG-RDPAVGLLEBRD 191
QY 180 YFKANDTLGFMMLAVALMAATHAVYKLLFEYHRRK-----KVQMP 224
DB 192 YVVSYSVCSFPLPCPLMLLWYATERGLQRWVARAKLHGRAPRPGGPPSPTPAP 251
QY 225 AISQWTHGPRATQGAANWTAGFGRGMPPTLL---GIRONGHAAASRLGMBVKE 281
DB 252 RLQPPC--GPOCAPPAGLPPDPGSCAPDAARAALPPQTPQTRRRRAKITGRE 309
QY 282 KOLGRMFYAITLLFLLMSPIYVACVWRVYKACVPRYATAVWMSFPAQAAVNPVYCE 341
DB 310 RKAKVLEVVGAFILCMTFPFVYHITQALCPACSVPRIVSAVWMLGVNSALMPVIT 369
QY 342 LANKDLK 348
DB 370 VENAEFR 376

RESULT 14
JC2459
gastrin/cholecystokinin B receptor - rabbit
C.Species: Oryctolagus cuniculus (domestic rabbit)
C.Date: 21-Feb-1995 #sequence_revision 05-Apr-1995 #text_change 09-Jul-2004
C.Accession: JC2459
R.Blandiazzi, C.; Song, I.; Yamada, T.
Biochem. Biophys. Res. Commun. 202, 947-953, 1994
A.Title: Molecular cloning and structural analysis of the rabbit gastrin/CCKB receptor
A.Reference number: JC2459; MUID:94324990; PMID:8048969
A.Accession: JC2459
A.Molecule type: mRNA
A.Residues: 1-452 <BLA>
A.Cross-references: UNIPROT:P46627; UNIPARC:UPI000012B0EA; GB:LJ1548; NID:9495663; PIDN
C.Genetics:
A.Introns: 49/1; 133/1; 216/2; 273/1
C.Superfamily: neurokinin 1 receptor
C.Keywords: receptor; transmembrane protein
F.56-79/Domain: transmembrane #status predicted <TM1>
F.85-104/Domain: transmembrane #status predicted <TM2>
F.130-149/Domain: transmembrane #status predicted <TM3>
F.169-187/Domain: transmembrane #status predicted <TM4>
F.217-237/Domain: transmembrane #status predicted <TM5>
F.339-359/Domain: transmembrane #status predicted <TM6>
F.381-400/Domain: transmembrane #status predicted <TM7>

Query Match 12.4%; Score 247; DB 2; Length 452;
Best Local Similarity 24.1%; Pred. No. 9.3e-15;
Matches 101; Conservative 53; Mismatches 179; Indels 86; Gaps 13;

QY 3 NTTGEPEVSGALSPPSASAYKVLVLLGLIMCVSLAGNALISLVLKERALKKAPYFLL 62
DB 34 NISCEPRIRGA-GTRELAIKRVTLVYVFLMSVGNLILVIGLSRLKLTVNAFLL 92
QY 63 DCLADGIRSAVCFPPVLASVHGGSWTFSALSCKIVAMAVLFCFHAAPMLFCISVTRY 122
DB 93 SLAVSDLLAVALCMPTLLPNLMG-TFIFGTVCRAVSYLKMGVSVSSTLSVALALERY 151
QY 123 MAIAHHRFAKMTLMTCAAVICMAWTLGVMAFP-PVF-----DVGYTFIREEDOCIFE 177
DB 152 SAICRPLQARVWQTSNARVITATWLSGLLVPPVPTAVOPAGABAL-----QCVNR 209
QY 178 HRYFKANDTLGFMML-----AVLMAATHAVYKLLFEYHRRKKPKVQMPAISQMT 231
DB 207 WPSARVQRTWSVLLILLFFVPGVMAVAVGLISRLYLGLRFDSDSDSESGSRVAGGQ 266
QY 232 FHGPGATGQAAANW-----IAGRGRGMPMP 256
DB 267 LPGAAPGVHONGRCRPREAGLAGEDGCGCYQLPRSRALBELSLTAISGFGPPRP- 325

QY 257 TLGIRONGHAASRRLLGMDVKGKQLGRMFAITLLFLLMSPYIVACYWRVFKACA 316
DB 326 -----AQAKL-----AKKRVRMILVIVLFFMCWLPVYSANTWRAPFDGPGA 368
QY 317 VPHRYLATV-----WMSFAQAANPIV-CELLNKDLKCLTTTHAPCWGTGAPAPREP 369
DB 369 --HRAISGAPISFIHLLSYASACNPLVVCFMHRRFRQACLDTCARC-----CPRPP 418

RESULT 15

S36402

serotonin receptor 7 - mouse

N.Alternate names: 5-hydroxytryptamine 7 receptor (5HTR-7)

C.Species: Mus musculus (house mouse)

C.Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004

C.Accession: I48779; S36402

R.Plasmid: J.L.; Amlaky, N.; Hen, R.

Mol. Pharmacol. 44, 229-236, 1993

A.Title: Molecular cloning of a mammalian serotonin receptor that activates adenylate cy

A.Reference number: I48779; PMID:93360913; PMID:8394987

A.Accession: I48779

A.Status: translated from GB/EMBL/DBJ

A.Molecule type: mRNA

A.Residues: 1-448 <RES>

A.Cross-references: UNIPROT:P32304; UNIPARC:UPI000002A019; EMBL:Z23107; NID:G396586; PID

C.Superfamily: vertebrate rhodopsin

C.Keyword: G protein-coupled receptor; glycoprotein; neurotransmitter receptor; transme

Query Match

12.2%; Score 244; DB 2; Length 448;

Best local similarity 22.0%; Pred. No. 1.7e-14;

Matches 82; Conservative 66; Mismatches 167; Indels 58; Gaps 10;

QY 8 DEEVSGALSPPSASAVKLY--LLGLMCVSLAGNAIISLVYKERALHKAPYFLDL 64
DB 67 PNVSGCGEINGRVEKVTIGSILTLITLITAGNCIVISYCFYKQVROPSNYLIVSL 126
QY 65 CIADGIRSAVCPPEVLASVRHSSWTFESALSKIVAFMAVLPFHAFMLFCISVTRMYA 124
DB 127 ALADLSVAVAVMPEVSVTDLIGGKMTFGHFPCNVFTAMDVCTASIMTLCVISIDRYLG 186
QY 125 IAHHRFYAKRMTLMTCAAVICMAVTLVMAFPFVDVGTYKFIREDQCF--EHRFYK 182
DB 187 ITRPLTPYRONGKCKAKMILSVPLSASTLPPLF--GMAQVNDKXCLISQDFGYT 244
QY 183 ANDTGFMLMLAVMAATHAVYGLLLFEYRHRKMKPVQNPALISQNWTFHGPATGOAA 242
DB 245 YSTAVAFYIIPMSVLMFYQIY-----KAARKSAA 274
QY 243 AMWIAFGFGPMPTLLGIRONG-----HAASRLL-----GMDEVKGEKQLGRM 287
DB 275 KHKFSGFPR-VOEVSISL--NGVVKLQKEVEECANLSRLKHERRKISFKREOKAATT 331
QY 288 FVAITLLFLLMSPYIVACYWRV--KACA--VPHRYLATVWMSFAQAANPIVCEFLN 344
DB 332 LGITVCAFTVCMPLPFLISTARPFICGTSCCIPLWVERTCLWLGANSLINPFISFFN 391
QY 345 KDLKCLTTHAPC 357
DB 392 RDLRTYRSLLQC 404

Search completed: March 7, 2006, 12:54:58
Job time : 42 secs

THIS PAGE BLANK (USPTO)

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioceleration Ltd.

OM protein - protein search, using sw model

Run on: March 7, 2006, 12:55:09 / Search time 165 Seconds
(without alignments)
944.548 Million cell updates/sec

Title: US-10-782-596-20

Perfect score: 1992
Sequence: 1 MANTTGBPREVSGALSPSPA.....HAPCMGTGAPAPRPPCYM 373

Scoring table:

BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1867569 seqs, 417829326 residues

Total number of hits satisfying chosen parameters: 1867569

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 10%

Listing first 45 summaries

Database : Published Applications AA Main:
1: /cgn2_6/prodata/1/pubppaa/US07_PUBCOMB.pep:*
2: /cgn2_6/prodata/1/pubppaa/US08_PUBCOMB.pep:*
3: /cgn2_6/prodata/1/pubppaa/US09_PUBCOMB.pep:*
4: /cgn2_6/prodata/1/pubppaa/US10_PUBCOMB.pep:*
5: /cgn2_6/prodata/1/pubppaa/US10_PUBCOMB.pep:*
6: /cgn2_6/prodata/1/pubppaa/US11_PUBCOMB.pep:*

Prod. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	DB ID	Description
1	1992	100.0	373	US-09-875-076-20 Sequence 20, Appl
2	1992	100.0	373	US-09-876-252-22 Sequence 22, Appl
3	1992	100.0	373	US-10-872-983-20 Sequence 20, Appl
4	1992	100.0	373	US-10-393-807-20 Sequence 20, Appl
5	1992	100.0	373	US-10-417-820A-22 Sequence 22, Appl
6	1992	100.0	373	US-10-723-955-22 Sequence 22, Appl
7	1992	100.0	373	US-10-782-596-20 Sequence 20, Appl
8	1992	100.0	373	US-10-723-955-22 Sequence 22, Appl
9	1986	99.7	373	US-10-318-142-6 Sequence 6, Appl
10	1986	99.7	373	US-10-225-567A-615 Sequence 615, App
11	1986	99.7	373	US-10-788-197-59 Sequence 59, Appl
12	1986	99.7	373	US-10-898-329-6 Sequence 6, Appl
13	1986	99.7	378	US-10-073-885-77 Sequence 77, Appl
14	1986	99.7	387	US-10-788-197-61 Sequence 61, Appl
15	1986	99.7	611	US-10-505-486-49 Sequence 49, Appl
16	1977	99.2	373	US-09-760-354A-2 Sequence 2, Appl
17	1975	99.1	373	US-10-318-142-26 Sequence 26, Appl
18	1975	99.1	373	US-10-898-329-26 Sequence 26, Appl
19	1973	99.0	373	US-10-369-022-10 Sequence 10, Appl
20	1973	99.0	373	US-10-400-991-71 Sequence 71, Appl
21	1983	95.0	388	US-10-633-438-52 Sequence 52, Appl
22	1893	95.0	388	US-10-788-197-63 Sequence 63, Appl
23	1893	95.0	388	US-10-301-772-52 Sequence 52, Appl
24	1893	95.0	402	US-10-788-197-65 Sequence 65, Appl
25	1386	69.6	284	US-10-073-885-71 Sequence 71, Appl
26	1288.5	64.7	370	US-09-875-076-26 Sequence 26, Appl
27	1288.5	64.7	370	US-09-876-252-28 Sequence 28, Appl

28	1288.5	64.7	370	US-10-043-945-2	Sequence 2, Appl
29	1288.5	64.7	370	US-10-165-844-7	Sequence 7, Appl
30	1288.5	64.7	370	US-10-318-142-4	Sequence 4, Appl
31	1288.5	64.7	370	US-10-318-142-24	Sequence 24, Appl
32	1288.5	64.7	370	US-10-225-567A-611	Sequence 611, App
33	1288.5	64.7	370	US-10-572-983-26	Sequence 26, Appl
34	1288.5	64.7	370	US-10-417-820A-28	Sequence 28, Appl
35	1288.5	64.7	370	US-10-417-820A-28	Sequence 86, App
36	1288.5	64.7	370	US-10-292-798-886	Sequence 14, Appl
37	1288.5	64.7	370	US-10-692-605-14	Sequence 28, Appl
38	1288.5	64.7	370	US-10-723-955-28	Sequence 26, Appl
39	1288.5	64.7	370	US-10-782-596-26	Sequence 6, Appl
40	1288.5	64.7	370	US-10-755-889-6	Sequence 67, Appl
41	1288.5	64.7	370	US-10-788-197-67	Sequence 4, Appl
42	1288.5	64.7	370	US-10-898-329-4	Sequence 24, Appl
43	1288.5	64.7	370	US-10-898-329-24	Sequence 28, Appl
44	1288.5	64.7	370	US-10-723-955-28	Sequence 79, Appl
45	1288.5	64.7	379	US-10-073-885-79	

ALIGNMENTS

RESULT 1
US-09-875-076-20
; Sequence 20, Application US/09875076
; Publication No. US20030017528A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Ruoping
; APPLICANT: Dang, Huang T.
; APPLICANT: Liaw, Chen W.
; APPLICANT: Lin, I-Lin
; TITLE OF INVENTION: Human Orphan G Protein Coupled Receptors
; FILE REFERENCE: AREN0050
; CURRENT APPLICATION NUMBER: US/09/875,076
; CURRENT FILING DATE: 2001-06-06
; PRIOR APPLICATION NUMBER: 09/417,044
; PRIOR FILING DATE: 1999-10-12
; PRIOR APPLICATION NUMBER: 60/120,416
; PRIOR FILING DATE: 1999-02-16
; PRIOR APPLICATION NUMBER: 60/121,851
; PRIOR FILING DATE: 1999-02-26
; PRIOR APPLICATION NUMBER: 60/123,946
; PRIOR FILING DATE: 1999-03-12
; PRIOR APPLICATION NUMBER: 60/123,949
; PRIOR FILING DATE: 1999-03-12
; PRIOR APPLICATION NUMBER: 60/136,436
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/136,437
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/136,439
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/136,567
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/137,127
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/137,131
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/141,448
; PRIOR FILING DATE: 1999-06-29
; PRIOR APPLICATION NUMBER: 60/156,653
; PRIOR FILING DATE: 1999-09-29
; PRIOR APPLICATION NUMBER: 60/156,633
; PRIOR FILING DATE: 1999-09-29
; PRIOR APPLICATION NUMBER: 60/156,555
; PRIOR FILING DATE: 1999-09-29
; PRIOR APPLICATION NUMBER: 60/156,634
; PRIOR FILING DATE: 1999-09-29
; PRIOR APPLICATION NUMBER: 60/157,280
; PRIOR FILING DATE: 1999-10-01
; PRIOR APPLICATION NUMBER: 60/157,294
; PRIOR FILING DATE: 1999-10-01
; PRIOR APPLICATION NUMBER: 60/157,281

```
/ PRIOR FILING DATE: 1999-10-01
/ PRIOR APPLICATION NUMBER: 60/157,293
/ PRIOR FILING DATE: 1998-10-01
/ PRIOR APPLICATION NUMBER: 60/157,282
/ PRIOR FILING DATE: 1999-10-01
/ NUMBER OF SEQ ID NOS: 74
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 20
/ LENGTH: 373
/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-09-875-076-20

Query Match      100.0%  Score 1992;  DB 3;  Length 373;
Beet Local Similarity 100.0%;  Pred. No. 5e-189;
Matches 373;  Conservative 0;  Mismatches 0;  Indels 0;  Gaps 0;

QY 1 MANTTGEPEVSGALSPPSASAVYVKLVLLGLIMCVSLAGNAIISLLVTKERALHKAPYYF 60
   |||||
DB 1 MANTTGEPEVSGALSPPSASAVYVKLVLLGLIMCVSLAGNAIISLLVTKERALHKAPYYF 60
   |||||

QY 61 LLDLCLADGIRSAVCPFPYLASVRRGSSWTFPSALSKTIYAFMAVLFCEFAAFMLFCISVT 120
   |||||
DB 61 LLDLCLADGIRSAVCPFPYLASVRRGSSWTFPSALSKTIYAFMAVLFCEFAAFMLFCISVT 120
   |||||

QY 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLVMAAPFPVDTGYTFIREEDOCIFEHRY 180
   |||||
DB 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLVMAAPFPVDTGYTFIREEDOCIFEHRY 180
   |||||

QY 181 FRANDTLGFMMLAVLMAATHAVYKLLLFERYRHRMRKPVQWPAISQWTFHGPATQ 240
   |||||
DB 181 FRANDTLGFMMLAVLMAATHAVYKLLLFERYRHRMRKPVQWPAISQWTFHGPATQ 240
   |||||

QY 241 AAANWJAGRGMPPTLLGIRONGHAARRLIGMEVYGEQQLGMFPAITLLFLLMS 300
   |||||
DB 241 AAANWJAGRGMPPTLLGIRONGHAARRLIGMEVYGEQQLGMFPAITLLFLLMS 300
   |||||

QY 301 PVIYACVWFYKACAVPHRYLATAYWMSFAQAAVNPICYELINKDKKCLTTHAPCMGT 360
   |||||
DB 301 PVIYACVWFYKACAVPHRYLATAYWMSFAQAAVNPICYELINKDKKCLTTHAPCMGT 360
   |||||

QY 361 GGAPAPREBYCWM 373
   |||||
DB 361 GGAPAPREBYCWM 373
   |||||

RESULT 2
US-09-876-252-22
/ Sequence 22, Application US/09876252
/ Publication No. US20030018182A1
/ GENERAL INFORMATION:
/ APPLICANT: Behan, Dominic P.
/ APPLICANT: Lehmann-Brulisma, Karin
/ APPLICANT: Chalmers, Derek T.
/ APPLICANT: Lowitz, Kevin P.
/ APPLICANT: Lin, I-Lin
/ APPLICANT: Dang, Huong T.
/ APPLICANT: Chen, Kuoping
/ APPLICANT: Hlaw, Chen W.
/ TITLE OF INVENTION: Non-Endogenous Constititively Activated Human G Protein Coupled Rec
/ FILE REFERENCE: AREN-0054
/ CURRENT APPLICATION NUMBER: US/09/876,252
/ CURRENT FILING DATE: 2001-06-07
/ PRIOR APPLICATION NUMBER: 09/416,760
/ PRIOR FILING DATE: 1999-10-12
/ PRIOR APPLICATION NUMBER: 09/170,496
/ PRIOR FILING DATE: 1998-10-13
/ PRIOR APPLICATION NUMBER: 60/110,060
/ PRIOR FILING DATE: 1998-11-27
/ PRIOR APPLICATION NUMBER: 60/120,416
/ PRIOR FILING DATE: 1999-02-16
/ PRIOR APPLICATION NUMBER: 60/121,852
/ PRIOR FILING DATE: 1999-02-26
```

```
/ PRIOR APPLICATION NUMBER: 60/109,213
/ PRIOR FILING DATE: 1998-11-20
/ PRIOR APPLICATION NUMBER: 60/123,944
/ PRIOR FILING DATE: 1999-03-12
/ PRIOR APPLICATION NUMBER: 60/123,945
/ PRIOR FILING DATE: 1999-03-12
/ PRIOR APPLICATION NUMBER: 60/123,948
/ PRIOR FILING DATE: 1999-03-12
/ PRIOR APPLICATION NUMBER: 60/123,951
/ PRIOR FILING DATE: 1999-03-12
/ PRIOR APPLICATION NUMBER: 60/123,946
/ PRIOR FILING DATE: 1999-03-12
/ PRIOR APPLICATION NUMBER: 60/123,949
/ PRIOR FILING DATE: 1999-03-12
/ PRIOR APPLICATION NUMBER: 60/152,524
/ PRIOR FILING DATE: 1999-09-03
/ PRIOR APPLICATION NUMBER: 60/151,114
/ PRIOR FILING DATE: 1999-08-27
/ PRIOR APPLICATION NUMBER: 60/108,029
/ PRIOR FILING DATE: 1998-11-12
/ PRIOR APPLICATION NUMBER: 60/136,436
/ PRIOR FILING DATE: 1999-05-28
/ PRIOR APPLICATION NUMBER: 60/136,439
/ PRIOR FILING DATE: 1999-05-28
/ PRIOR APPLICATION NUMBER: 60/136,567
/ PRIOR FILING DATE: 1999-05-28
/ PRIOR APPLICATION NUMBER: 60/137,127
/ PRIOR FILING DATE: 1999-05-28
/ PRIOR APPLICATION NUMBER: 60/137,131
/ PRIOR FILING DATE: 1999-05-28
/ PRIOR APPLICATION NUMBER: 60/141,448
/ PRIOR FILING DATE: 1999-06-29
/ PRIOR APPLICATION NUMBER: 60/136,437
/ PRIOR FILING DATE: 1999-05-28
/ PRIOR APPLICATION NUMBER: 60/156,555
/ PRIOR FILING DATE: 1999-09-29
/ PRIOR APPLICATION NUMBER: 60/156,634
/ PRIOR FILING DATE: 1999-09-29
/ PRIOR APPLICATION NUMBER: 60/156,653
/ PRIOR FILING DATE: 1999-09-29
/ PRIOR APPLICATION NUMBER: 60/157,280
/ PRIOR FILING DATE: 1999-10-01
/ PRIOR APPLICATION NUMBER: 60/157,294
/ PRIOR FILING DATE: 1999-10-01
/ PRIOR APPLICATION NUMBER: 60/157,281
/ PRIOR FILING DATE: 1999-10-01
/ PRIOR APPLICATION NUMBER: 60/157,282
/ PRIOR FILING DATE: 1999-10-01
/ PRIOR APPLICATION NUMBER: 60/156,633
/ PRIOR FILING DATE: 1999-09-29
/ NUMBER OF SEQ ID NOS: 146
/ SOFTWARE: PatentIn version 3.0
/ SEQ ID NO 22
/ LENGTH: 373
/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-09-876-252-22

Query Match      100.0%  Score 1992;  DB 3;  Length 373;
Beet Local Similarity 100.0%;  Pred. No. 5e-189;
Matches 373;  Conservative 0;  Mismatches 0;  Indels 0;  Gaps 0;

QY 1 MANTTGEPEVSGALSPPSASAVYVKLVLLGLIMCVSLAGNAIISLLVTKERALHKAPYYF 60
   |||||
DB 1 MANTTGEPEVSGALSPPSASAVYVKLVLLGLIMCVSLAGNAIISLLVTKERALHKAPYYF 60
   |||||

QY 61 LLDLCLADGIRSAVCPFPYLASVRRGSSWTFPSALSKTIYAFMAVLFCEFAAFMLFCISVT 120
   |||||
DB 61 LLDLCLADGIRSAVCPFPYLASVRRGSSWTFPSALSKTIYAFMAVLFCEFAAFMLFCISVT 120
   |||||

QY 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLVMAAPFPVDTGYTFIREEDOCIFEHRY 180
   |||||
DB 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLVMAAPFPVDTGYTFIREEDOCIFEHRY 180
   |||||
```


QY 181 FRANDTLGFMMLAVMAATHAVYKLLFEYRHRKKKPVQWPAISQWTFHGPATGQ 240
DB 181 FRANDTLGFMMLAVMAATHAVYKLLFEYRHRKKKPVQWPAISQWTFHGPATGQ 240
QY 241 AANWTAGRGMPPTLLGIRONGHAASRLLGMDEVGEKOLGDMFYAITLLFLLMS 300
DB 241 AANWTAGRGMPPTLLGIRONGHAASRLLGMDEVGEKOLGDMFYAITLLFLLMS 300
QY 301 PYVACYWVFYVACAVPHRYLATAVWMSFAQAANVPYVCFLLINKOLKKCLTTHAPCWGT 360
DB 301 PYVACYWVFYVACAVPHRYLATAVWMSFAQAANVPYVCFLLINKOLKKCLTTHAPCWGT 360
QY 361 GGAPAREPYCWM 373
DB 361 GGAPAREPYCWM 373

RESULT 3
US-10-272-983-20

/ Sequence 20, Application US/10272983
/ Publication No. US20030148450A1
/ GENERAL INFORMATION:
/ APPLICANT: Chen, Huoping
/ APPLICANT: Dang, Huong T.
/ APPLICANT: Liaw, Chen W.
/ APPLICANT: Lin, I-Lin
/ TITLE OF INVENTION: Human Orphan G Protein Coupled Receptors
/ FILE REFERENCE: AREN0050
/ CURRENT APPLICATION NUMBER: US/10/272,983
/ CURRENT FILING DATE: 2002-10-17
/ PRIOR APPLICATION NUMBER: US/09/417,044
/ PRIOR FILING DATE: 1999-10-12
/ PRIOR APPLICATION NUMBER: 60/109,213
/ PRIOR FILING DATE: 1998-11-20
/ PRIOR APPLICATION NUMBER: 60/120,416
/ PRIOR FILING DATE: 1999-02-16
/ PRIOR APPLICATION NUMBER: 60/121,851
/ PRIOR FILING DATE: 1999-02-26
/ PRIOR APPLICATION NUMBER: 60/123,946
/ PRIOR FILING DATE: 1999-03-12
/ PRIOR APPLICATION NUMBER: 60/123,949
/ PRIOR FILING DATE: 1999-03-12
/ PRIOR APPLICATION NUMBER: 60/136,436
/ PRIOR FILING DATE: 1999-05-28
/ PRIOR APPLICATION NUMBER: 60/136,437
/ PRIOR FILING DATE: 1999-05-28
/ PRIOR APPLICATION NUMBER: 60/136,439
/ PRIOR FILING DATE: 1999-05-28
/ PRIOR APPLICATION NUMBER: 60/136,567
/ PRIOR FILING DATE: 1999-05-28
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 74
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 20
/ LENGTH: 373
/ TYPE: PRT
/ ORGANISM: Homo sapiens
/ US-10-272-983-20

Query Match 100.0%; Score 1992; DB 4; Length 373;
Best Local Similarity 100.0%; Pred. No. 5e-189;
Matches 373; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MANTTGPEEVSAGLSPPSASAYVKLVLLGLIMCVSLAGNAIISLVTKERALHKAARYF 60
DB 1 MANTTGPEEVSAGLSPPSASAYVKLVLLGLIMCVSLAGNAIISLVTKERALHKAARYF 60
QY 61 LLDLCLADGIRSAVCPFPVLASVYRHGSSWTFSSALSKCIYAFMAVLFCHFAAFMLFCISVT 120
DB 61 LLDLCLADGIRSAVCPFPVLASVYRHGSSWTFSSALSKCIYAFMAVLFCHFAAFMLFCISVT 120
QY 121 RYVAIAHHRFYAKRMTLMTCAAVICMAWTLISVMAAPFPVDVGTYKFIREDDCIFEHRY 180

DB 121 RYVAIAHHRFYAKRMTLMTCAAVICMAWTLISVMAAPFPVDVGTYKFIREDDCIFEHRY 180
QY 181 FRANDTLGFMMLAVMAATHAVYKLLFEYRHRKKKPVQWPAISQWTFHGPATGQ 240
DB 181 FRANDTLGFMMLAVMAATHAVYKLLFEYRHRKKKPVQWPAISQWTFHGPATGQ 240
QY 241 AANWTAGRGMPPTLLGIRONGHAASRLLGMDEVGEKOLGDMFYAITLLFLLMS 300
DB 241 AANWTAGRGMPPTLLGIRONGHAASRLLGMDEVGEKOLGDMFYAITLLFLLMS 300
QY 301 PYVACYWVFYVACAVPHRYLATAVWMSFAQAANVPYVCFLLINKOLKKCLTTHAPCWGT 360
DB 301 PYVACYWVFYVACAVPHRYLATAVWMSFAQAANVPYVCFLLINKOLKKCLTTHAPCWGT 360
QY 361 GGAPAREPYCWM 373
DB 361 GGAPAREPYCWM 373

RESULT 4
US-10-393-807-20

/ Sequence 20, Application US/10393807
/ Publication No. US20030175891A1
/ GENERAL INFORMATION:
/ APPLICANT: Chen, Huoping
/ APPLICANT: Dang, Huong T.
/ APPLICANT: Liaw, Chen W.
/ APPLICANT: Lin, I-Lin
/ TITLE OF INVENTION: Human Orphan G Protein Coupled Receptors
/ FILE REFERENCE: AREN0050
/ CURRENT APPLICATION NUMBER: US/10/393,807
/ CURRENT FILING DATE: 2003-03-21
/ PRIOR APPLICATION NUMBER: US/09/417,044
/ PRIOR FILING DATE: 1999-10-12
/ PRIOR APPLICATION NUMBER: 60/109,213
/ PRIOR FILING DATE: 1998-11-20
/ PRIOR APPLICATION NUMBER: 60/120,416
/ PRIOR FILING DATE: 1999-02-16
/ PRIOR APPLICATION NUMBER: 60/121,851
/ PRIOR FILING DATE: 1999-02-26
/ PRIOR APPLICATION NUMBER: 60/123,946
/ PRIOR FILING DATE: 1999-03-12
/ PRIOR APPLICATION NUMBER: 60/123,949
/ PRIOR FILING DATE: 1999-03-12
/ PRIOR APPLICATION NUMBER: 60/136,436
/ PRIOR FILING DATE: 1999-05-28
/ PRIOR APPLICATION NUMBER: 60/136,437
/ PRIOR FILING DATE: 1999-05-28
/ PRIOR APPLICATION NUMBER: 60/136,439
/ PRIOR FILING DATE: 1999-05-28
/ PRIOR APPLICATION NUMBER: 60/136,567
/ PRIOR FILING DATE: 1999-05-28
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 74
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 20
/ LENGTH: 373
/ TYPE: PRT
/ ORGANISM: Homo sapiens
/ US-10-393-807-20

Query Match 100.0%; Score 1992; DB 4; Length 373;
Best Local Similarity 100.0%; Pred. No. 5e-189;
Matches 373; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MANTTGPEEVSAGLSPPSASAYVKLVLLGLIMCVSLAGNAIISLVTKERALHKAARYF 60
DB 1 MANTTGPEEVSAGLSPPSASAYVKLVLLGLIMCVSLAGNAIISLVTKERALHKAARYF 60
QY 61 LLDLCLADGIRSAVCPFPVLASVYRHGSSWTFSSALSKCIYAFMAVLFCHFAAFMLFCISVT 120
DB 61 LLDLCLADGIRSAVCPFPVLASVYRHGSSWTFSSALSKCIYAFMAVLFCHFAAFMLFCISVT 120

QY 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLISVAMAPPVFDVGTYYKFIREDQCIFEHRX 180
| | | | |
DB 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLISVAMAPPVFDVGTYYKFIREDQCIFEHRX 180
QY 181 FRANDTLGFMMLAVLMAATHAVYKLLLFYRHRKMKVQVNPVPAISQWTFHGPATQ 240
| | | | |
DB 181 FRANDTLGFMMLAVLMAATHAVYKLLLFYRHRKMKVQVNPVPAISQWTFHGPATQ 240
QY 241 AAANNIAGRGMPPTLLGIRONGHAASRRLIGMDEVGKOLGMFYAITLLFLLMS 300
| | | | |
DB 241 AAANNIAGRGMPPTLLGIRONGHAASRRLIGMDEVGKOLGMFYAITLLFLLMS 300
QY 301 PYIVACYWRFVYKACAVPHRYLATATVWMSFAQAAVNPVPCFLNKKCLTTHAPCWGT 360
| | | | |
DB 301 PYIVACYWRFVYKACAVPHRYLATATVWMSFAQAAVNPVPCFLNKKCLTTHAPCWGT 360
QY 361 GGAPAPREPYCYM 373
| | | | |
DB 361 GGAPAPREPYCYM 373

RESULT 5
US-10-417-820A-22
; Sequence 22, Application US/10417820A
; Publication No. US20030229216A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Ruoping
; APPLICANT: Liaw, Chen W.
; APPLICANT: Lowitz, Kevin
; APPLICANT: Chalmers, Derek T.
; APPLICANT: Behan, Dominic P.
; TITLE OF INVENTION: Constitutively Activated Human G Protein Coupled
; FILE REFERENCE: 7 US28 CON
; CURRENT APPLICATION NUMBER: US/10/417, 820A
; CURRENT FILING DATE: 2003-04-16
; PRIOR APPLICATION NUMBER: 09/416, 760
; PRIOR FILING DATE: 1999-10-12
; PRIOR APPLICATION NUMBER: 09/170, 496
; PRIOR FILING DATE: 1998-10-13
; PRIOR APPLICATION NUMBER: 60/110, 060
; PRIOR FILING DATE: 1998-11-27
; PRIOR APPLICATION NUMBER: 60/120, 416
; PRIOR FILING DATE: 1999-02-16
; PRIOR APPLICATION NUMBER: 60/121, 852
; PRIOR FILING DATE: 1999-02-26
; PRIOR APPLICATION NUMBER: 60/109, 213
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: 60/123, 944
; PRIOR FILING DATE: 1999-03-12
; PRIOR APPLICATION NUMBER: 60/123, 945
; PRIOR FILING DATE: 1999-03-12
; PRIOR APPLICATION NUMBER: 60/123, 948
; PRIOR FILING DATE: 1999-03-12
; PRIOR APPLICATION NUMBER: 60/123, 951
; PRIOR FILING DATE: 1999-03-12
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 155
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 22
; LENGTH: 373
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-417-820A-22

Query Match 100.0%; Score 1992; DB 4; Length 373;
Best Local Similarity 100.0%; Pred. No. 5e-189;
Matches 373; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MANTTGPBEVSGALSPPSASAYKVLGLIMCVSLAGAAITSLVTKERALHKA PYPF 60
| | | | |
DB 1 MANTTGPBEVSGALSPPSASAYKVLGLIMCVSLAGAAITSLVTKERALHKA PYPF 60

QY 61 LIDLCLADGIRSAVCPPTVLTASVHRGSSWTFSALSCKIYAFMAVLFCHFAAMFLFCISVT 120
| | | | |
DB 61 LIDLCLADGIRSAVCPPTVLTASVHRGSSWTFSALSCKIYAFMAVLFCHFAAMFLFCISVT 120
QY 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLISVAMAPPVFDVGTYYKFIREDQCIFEHRX 180
| | | | |
DB 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLISVAMAPPVFDVGTYYKFIREDQCIFEHRX 180
QY 181 FRANDTLGFMMLAVLMAATHAVYKLLLFYRHRKMKVQVNPVPAISQWTFHGPATQ 240
| | | | |
DB 181 FRANDTLGFMMLAVLMAATHAVYKLLLFYRHRKMKVQVNPVPAISQWTFHGPATQ 240
QY 241 AAANNIAGRGMPPTLLGIRONGHAASRRLIGMDEVGKOLGMFYAITLLFLLMS 300
| | | | |
DB 241 AAANNIAGRGMPPTLLGIRONGHAASRRLIGMDEVGKOLGMFYAITLLFLLMS 300
QY 301 PYIVACYWRFVYKACAVPHRYLATATVWMSFAQAAVNPVPCFLNKKCLTTHAPCWGT 360
| | | | |
DB 301 PYIVACYWRFVYKACAVPHRYLATATVWMSFAQAAVNPVPCFLNKKCLTTHAPCWGT 360
QY 361 GGAPAPREPYCYM 373
| | | | |
DB 361 GGAPAPREPYCYM 373

RESULT 6
US-10-723-955-22
; Sequence 22, Application US/10723955
; Publication No. US20040110238A1
; GENERAL INFORMATION:
; APPLICANT: Behan, Dominic P.
; APPLICANT: Chalmers, Derek T.
; APPLICANT: Lin, I-Lin
; APPLICANT: Liaw, Chen W.
; APPLICANT: Lehman-Brunisma, Karin
; APPLICANT: Lowitz, Kevin P.
; APPLICANT: Dang, Huong T.
; APPLICANT: Chen, Ruoping
; APPLICANT: Gore, Martin
; APPLICANT: White, Carol
; TITLE OF INVENTION: Constitutively Activated Human G Protein Coupled
; FILE REFERENCE: 7 US29 CON
; CURRENT APPLICATION NUMBER: US/10/723, 955
; CURRENT FILING DATE: 2003-11-26
; PRIOR APPLICATION NUMBER: 10/417, 820
; PRIOR FILING DATE: 2003-04-16
; PRIOR APPLICATION NUMBER: 09/416, 760
; PRIOR FILING DATE: 1999-10-12
; PRIOR APPLICATION NUMBER: 09/170, 496
; PRIOR FILING DATE: 1998-10-13
; PRIOR APPLICATION NUMBER: 60/110, 060
; PRIOR FILING DATE: 1998-11-27
; PRIOR APPLICATION NUMBER: 60/120, 416
; PRIOR FILING DATE: 1999-02-16
; PRIOR APPLICATION NUMBER: 60/121, 852
; PRIOR FILING DATE: 1999-02-26
; PRIOR APPLICATION NUMBER: 60/109, 213
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: 60/123, 944
; PRIOR FILING DATE: 1999-03-12
; PRIOR APPLICATION NUMBER: 60/123, 945
; PRIOR FILING DATE: 1999-03-12
; PRIOR APPLICATION NUMBER: 60/123, 948
; PRIOR FILING DATE: 1999-03-12
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 22
; LENGTH: 373
; TYPE: PRT
; ORGANISM: Homo sapiens

US-10-723-955-22

Query Match 100.0%; Score 1992; DB 4; Length 373;
Best Local Similarity 100.0%; Pred. No. 5e-189;
Matches 373; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MANTTGEPEEVSALSPSPASAYVKLVLLGLIMCVSLAGNAIISLVKERALHKAPYF 60
DB 1 MANTTGEPEEVSALSPSPASAYVKLVLLGLIMCVSLAGNAIISLVKERALHKAPYF 60
QY 61 LLDLCLADGIRSAVCPFFVLASVRHGSSTFSAISCKIYAFMAVLFCFHAFFLCISVT 120
DB 61 LLDLCLADGIRSAVCPFFVLASVRHGSSTFSAISCKIYAFMAVLFCFHAFFLCISVT 120
QY 121 RYVAIAHHRFYAKRMTLMTCAAVICMAWTLVSMAAPPVFDVGTYKFIREEDCIFEHR 180
DB 121 RYVAIAHHRFYAKRMTLMTCAAVICMAWTLVSMAAPPVFDVGTYKFIREEDCIFEHR 180
QY 181 FKANDTLGFMMLAVLMAATHAVYGLLFEYRHRKMKPVQVNPALISQWTFHGPATGQ 240
DB 181 FKANDTLGFMMLAVLMAATHAVYGLLFEYRHRKMKPVQVNPALISQWTFHGPATGQ 240
QY 241 AAANWJAGRGSGMPPTLLGIRONGHAASRLLGMDVKGKQIGRMFYAITLLFLLMS 300
DB 241 AAANWJAGRGSGMPPTLLGIRONGHAASRLLGMDVKGKQIGRMFYAITLLFLLMS 300
QY 301 PYVACYWRFVYACAVPHRYLATAVWMSFQAANVPYVCFLLNKDKCLTTHACWGT 360
DB 301 PYVACYWRFVYACAVPHRYLATAVWMSFQAANVPYVCFLLNKDKCLTTHACWGT 360
QY 361 GGAPAREPYCWM 373
DB 361 GGAPAREPYCWM 373

RESULT 7
US-10-782-596-20

* Sequence 20, Application US/10782596
Publication No. US20040137509A1

GENERAL INFORMATION:

APPLICANT: Chen, Ruoping

APPLICANT: Dang, Huong T.

APPLICANT: Liaw, Chen W.

APPLICANT: Lin, I-Lin

TITLE OF INVENTION: Human Orphan G Protein Coupled Receptors

FILE REFERENCE: AREN0050

CURRENT APPLICATION NUMBER: US/10/782,596

CURRENT FILING DATE: 2004-02-19

PRIOR APPLICATION NUMBER: US/09/875,076

PRIOR FILING DATE: 2001-06-06

PRIOR APPLICATION NUMBER: 09/417,044

PRIOR FILING DATE: 1999-10-12

PRIOR APPLICATION NUMBER: 60/120,416

PRIOR FILING DATE: 1999-02-16

PRIOR APPLICATION NUMBER: 60/121,851

PRIOR FILING DATE: 1999-02-26

PRIOR APPLICATION NUMBER: 60/123,946

PRIOR FILING DATE: 1999-03-12

PRIOR APPLICATION NUMBER: 60/123,949

PRIOR FILING DATE: 1999-03-12

PRIOR APPLICATION NUMBER: 60/136,436

PRIOR FILING DATE: 1999-05-28

PRIOR APPLICATION NUMBER: 60/136,437

PRIOR FILING DATE: 1999-05-28

PRIOR APPLICATION NUMBER: 60/136,439

PRIOR FILING DATE: 1999-05-28

PRIOR APPLICATION NUMBER: 60/136,567

PRIOR FILING DATE: 1999-05-28

Remaining Prior Application data removed - See File Wrapper or PALM.

NUMBER OF SEQ ID NOS: 74

SOFTWARE: PatentIn Ver. 2.1

SEQ ID NO 20

LENGTH: 373

TYPE: PRT
ORGANISM: Homo sapiens
US-10-782-596-20

Query Match 100.0%; Score 1992; DB 4; Length 373;
Best Local Similarity 100.0%; Pred. No. 5e-189;
Matches 373; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MANTTGEPEEVSALSPSPASAYVKLVLLGLIMCVSLAGNAIISLVKERALHKAPYF 60
DB 1 MANTTGEPEEVSALSPSPASAYVKLVLLGLIMCVSLAGNAIISLVKERALHKAPYF 60
QY 61 LLDLCLADGIRSAVCPFFVLASVRHGSSTFSAISCKIYAFMAVLFCFHAFFLCISVT 120
DB 61 LLDLCLADGIRSAVCPFFVLASVRHGSSTFSAISCKIYAFMAVLFCFHAFFLCISVT 120
QY 121 RYVAIAHHRFYAKRMTLMTCAAVICMAWTLVSMAAPPVFDVGTYKFIREEDCIFEHR 180
DB 121 RYVAIAHHRFYAKRMTLMTCAAVICMAWTLVSMAAPPVFDVGTYKFIREEDCIFEHR 180
QY 181 FKANDTLGFMMLAVLMAATHAVYGLLFEYRHRKMKPVQVNPALISQWTFHGPATGQ 240
DB 181 FKANDTLGFMMLAVLMAATHAVYGLLFEYRHRKMKPVQVNPALISQWTFHGPATGQ 240
QY 241 AAANWJAGRGSGMPPTLLGIRONGHAASRLLGMDVKGKQIGRMFYAITLLFLLMS 300
DB 241 AAANWJAGRGSGMPPTLLGIRONGHAASRLLGMDVKGKQIGRMFYAITLLFLLMS 300
QY 301 PYVACYWRFVYACAVPHRYLATAVWMSFQAANVPYVCFLLNKDKCLTTHACWGT 360
DB 301 PYVACYWRFVYACAVPHRYLATAVWMSFQAANVPYVCFLLNKDKCLTTHACWGT 360
QY 361 GGAPAREPYCWM 373
DB 361 GGAPAREPYCWM 373

RESULT 8
US-10-723-955-22

* Sequence 22, Application US/10723955
Publication No. US20050227295A9

GENERAL INFORMATION:

APPLICANT: Behan, Dominic P.

APPLICANT: Chalmers, Derek T.

APPLICANT: Lin, I-Lin

APPLICANT: Liaw, Chen W.

APPLICANT: Lehman-Brunisma, Karin

APPLICANT: Lowitz, Kevin P.

APPLICANT: Dang, Huong T.

APPLICANT: Chen, Ruoping

APPLICANT: Gore, Martin

APPLICANT: White, Carol

TITLE OF INVENTION: Constitutively Activated Human G Protein Coupled

FILE REFERENCE: 7,US29, CON

CURRENT APPLICATION NUMBER: US/10/723,955

CURRENT FILING DATE: 2003-11-26

PRIOR APPLICATION NUMBER: 10/417,820

PRIOR FILING DATE: 2003-4-16

PRIOR APPLICATION NUMBER: 09/416,760

PRIOR FILING DATE: 1999-10-12

PRIOR APPLICATION NUMBER: 09/170,496

PRIOR FILING DATE: 1998-10-13

PRIOR APPLICATION NUMBER: 60/110,060

PRIOR FILING DATE: 1998-11-27

PRIOR APPLICATION NUMBER: 60/120,416

PRIOR FILING DATE: 1999-02-16

PRIOR APPLICATION NUMBER: 60/121,852

PRIOR FILING DATE: 1999-02-26

PRIOR APPLICATION NUMBER: 60/109,213

PRIOR FILING DATE: 1998-11-20

PRIOR APPLICATION NUMBER: 60/123,944

PRIOR FILING DATE: 1999-03-12

```

; PRIOR APPLICATION NUMBER: 60/123,945
; PRIOR FILING DATE: 1999-03-12
; PRIOR APPLICATION NUMBER: 60/123,948
; PRIOR FILING DATE: 1999-03-12
; Remaining prior Application data removed - See file wrapper or PALM.
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 22
; LENGTH: 373
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-723-955-22

```

```

Query Match      100.0%; Score 1992; DB 5; Length 373;
Best Local Similarity 100.0%; Pred. No. 5e-189;
Matches 373; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1 MANTGEPPEVSGALSPPSASAVYKLVLLGLIMCVSLAGNALISLLVTKERALHKAPYYF 60
DB 1 MANTGEPPEVSGALSPPSASAVYKLVLLGLIMCVSLAGNALISLLVTKERALHKAPYYF 60
QY 61 LLDLCIADGIRSAVCEPFLVSVRHGSSWTFSAISCKIYAFMAVLFCHAAFMFLFCISVT 120
DB 61 LLDLCIADGIRSAVCEPFLVSVRHGSSWTFSAISCKIYAFMAVLFCHAAFMFLFCISVT 120
QY 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLISVMAAPPPVFDVGTGYKFIREDQCIFEHRX 180
DB 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLISVMAAPPPVFDVGTGYKFIREDQCIFEHRX 180
QY 181 FRANDTLGFMLMLAVMAATHAIVYKLLLFYRHRKMKPVQNVPAISQWTFHGPATGQ 240
DB 181 FRANDTLGFMLMLAVMAATHAIVYKLLLFYRHRKMKPVQNVPAISQWTFHGPATGQ 240
QY 181 FRANDTLGFMLMLAVMAATHAIVYKLLLFYRHRKMKPVQNVPAISQWTFHGPATGQ 240
DB 181 FRANDTLGFMLMLAVMAATHAIVYKLLLFYRHRKMKPVQNVPAISQWTFHGPATGQ 240
QY 241 AAANWLAGRGMPPTLLGIRONGHAASRLIGMDVGEKQLGKMFYAITLLFLFLMS 300
DB 241 AAANWLAGRGMPPTLLGIRONGHAASRLIGMDVGEKQLGKMFYAITLLFLFLMS 300
QY 301 PYIVACYRVEFYKACAVPHRYLATAVMMSFAQAAVNPVYCFLLNDLKKCLTTTHAPCWGT 360
DB 301 PYIVACYRVEFYKACAVPHRYLATAVMMSFAQAAVNPVYCFLLNDLKKCLTTTHAPCWGT 360
QY 361 GGAPAPREPYCVM 373
DB 361 GGAPAPREPYCVM 373

```

```

RESULT 9
US-10-318-142-6
; Sequence 6, Application US/10318142
; Publication No. US20030077662A1
; GENERAL INFORMATION:

```

```

; APPLICANT: Yamanouchi Pharmaceutical Co., Ltd.
; TITLE OF INVENTION: A novel G protein coupled receptor protein
; FILE REFERENCE: Y9905
; CURRENT APPLICATION NUMBER: US/10/318,142
; CURRENT FILING DATE: 2002-12-13
; PRIOR APPLICATION NUMBER: US/09/622,439
; PRIOR FILING DATE: 2000-08-17
; PRIOR APPLICATION NUMBER: JP P1998-060245
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: JP P1999-026774
; PRIOR FILING DATE: 1999-02-03
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 6
; LENGTH: 373
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-318-142-6

```

```

Query Match      99.7%; Score 1986; DB 4; Length 373;
Best Local Similarity 99.7%; Pred. No. 2e-188;
Matches 372; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```

```

QY 1 MANTGEPPEVSGALSPPSASAVYKLVLLGLIMCVSLAGNALISLLVTKERALHKAPYYF 60
DB 1 MANTGEPPEVSGALSPPSASAVYKLVLLGLIMCVSLAGNALISLLVTKERALHKAPYYF 60
QY 61 LLDLCIADGIRSAVCEPFLVSVRHGSSWTFSAISCKIYAFMAVLFCHAAFMFLFCISVT 120
DB 61 LLDLCIADGIRSAVCEPFLVSVRHGSSWTFSAISCKIYAFMAVLFCHAAFMFLFCISVT 120
QY 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLISVMAAPPPVFDVGTGYKFIREDQCIFEHRX 180
DB 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLISVMAAPPPVFDVGTGYKFIREDQCIFEHRX 180
QY 181 FRANDTLGFMLMLAVMAATHAIVYKLLLFYRHRKMKPVQNVPAISQWTFHGPATGQ 240
DB 181 FRANDTLGFMLMLAVMAATHAIVYKLLLFYRHRKMKPVQNVPAISQWTFHGPATGQ 240
QY 241 AAANWLAGRGMPPTLLGIRONGHAASRLIGMDVGEKQLGKMFYAITLLFLFLMS 300
DB 241 AAANWLAGRGMPPTLLGIRONGHAASRLIGMDVGEKQLGKMFYAITLLFLFLMS 300
QY 301 PYIVACYRVEFYKACAVPHRYLATAVMMSFAQAAVNPVYCFLLNDLKKCLTTTHAPCWGT 360
DB 301 PYIVACYRVEFYKACAVPHRYLATAVMMSFAQAAVNPVYCFLLNDLKKCLTTTHAPCWGT 360
QY 361 GGAPAPREPYCVM 373
DB 361 GGAPAPREPYCVM 373

```

```

RESULT 10
US-10-225-567A-615
; Sequence 615, Application US/10225567A
; Publication No. US20030113798A1
; GENERAL INFORMATION:
; APPLICANT: Lifespan Biosciences
; APPLICANT: Brown, Joseph P.
; APPLICANT: Burnet, Glenna C.
; APPLICANT: Roush, Christine L.
; TITLE OF INVENTION: ANTIGENIC PEPTIDES AND ANTIBODIES FOR G PROTEIN-COUPLED RECEPTORS
; FILE REFERENCE: 1920-4-4
; CURRENT APPLICATION NUMBER: US/10/225,567A
; CURRENT FILING DATE: 2001-12-19
; PRIOR APPLICATION NUMBER: 60/257,144
; PRIOR FILING DATE: 2000-12-19
; NUMBER OF SEQ ID NOS: 2292
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 615
; LENGTH: 373
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-225-567A-615

```

```

Query Match      99.7%; Score 1986; DB 4; Length 373;
Best Local Similarity 99.7%; Pred. No. 2e-188;
Matches 372; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```

```

QY 1 MANTGEPPEVSGALSPPSASAVYKLVLLGLIMCVSLAGNALISLLVTKERALHKAPYYF 60
DB 1 MANTGEPPEVSGALSPPSASAVYKLVLLGLIMCVSLAGNALISLLVTKERALHKAPYYF 60
QY 61 LLDLCIADGIRSAVCEPFLVSVRHGSSWTFSAISCKIYAFMAVLFCHAAFMFLFCISVT 120
DB 61 LLDLCIADGIRSAVCEPFLVSVRHGSSWTFSAISCKIYAFMAVLFCHAAFMFLFCISVT 120
QY 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLISVMAAPPPVFDVGTGYKFIREDQCIFEHRX 180
DB 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLISVMAAPPPVFDVGTGYKFIREDQCIFEHRX 180
QY 181 FRANDTLGFMLMLAVMAATHAIVYKLLLFYRHRKMKPVQNVPAISQWTFHGPATGQ 240
DB 181 FRANDTLGFMLMLAVMAATHAIVYKLLLFYRHRKMKPVQNVPAISQWTFHGPATGQ 240

```

QY	241	AAANNAIAGGRBEMPTLLIGTRONGHAAASRLLIGMEVYGEKQSGMFAITLLPILWMS	300
Db	241	AAANNAIAGGRBEMPTLLIGTRONGHAAASRLLIGMEVYGEKQSGMFAITLLPILWMS	300
QY	301	PYIVACYMRVFFKACAVPHRYLTATAYWMSPAQAAVNPICFLNKDLKKCLTTHAPCWGT	360
Db	301	PYIVACYMRVFFKACAVPHRYLTATAYWMSPAQAAVNPICFLNKDLKKCLTTHAPCWGT	360
QY	361	GGAPAPREBYCYVM	373
Db	361	GGAPAPREBYCYVM	373

```

RESULT 11
US-10-788-197-59
; Sequence 59, Application US/10788197
; Publication No. US20050032125A1
; GENERAL INFORMATION:
; APPLICANT: OAKLEY, ROBERT H.
; APPLICANT: HUDSON, CHRISTINE C.
; TITLE OF INVENTION: CONSTITUTIVELY TRANSLOCATING CELL LINE
; FILE REFERENCE: NRK.108
; CURRENT APPLICATION NUMBER: US/10788,197
; CURRENT FILING DATE: 2004-02-26
; PRIOR APPLICATION NUMBER: PCT/US03/14581
; PRIOR FILING DATE: 2003-05-12
; PRIOR APPLICATION NUMBER: 60/379,986
; PRIOR FILING DATE: 2002-05-13
; PRIOR APPLICATION NUMBER: 60/401,698
; PRIOR FILING DATE: 2002-08-07
; NUMBER OF SEQ ID NOS: 94
; SOFTWARE: PatentIn Ver. 3.2
; SEQ ID NO 59
; LENGTH: 373
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-788-197-59

```

Query Match	99.7%	Score 1986	DB 5	Length 373
Best Local Similarity	99.7%	Pred. No. 2e-188		
Matches 372; Conservative	0	Mismatches	1	Indels 0
				Gaps 0

Qy	1	MANTTGEPEEVS	GALSP	BSASAVYK	VLGLIMCVSLAGAILISLV	KKERALHKAPYYF	60
Db	1	MANTTGEPEEVS	GALSP	BSASAVYK	VLGLIMCVSLAGAILISLV	KKERALHKAPYYF	60
Qy	61	LIDLCLADISR	SAVCEP	PYLASVRHGS	SMTFSAL	SKTIVAFMAVLCFHAAPMLPCISVT	120
Db	61	LIDLCLADISR	SAVCEP	PYLASVRHGS	SMTFSAL	SKTIVAFMAVLCFHAAPMLPCISVT	120
Qy	121	RYMALAHHR	FYAKRMTLMT	CAAVICMAWTL	SVMAAPRV	VDGYTKFIREDDCIFEHR	180
Db	121	RYMALAHHR	FYAKRMTLMT	CAAVICMAWTL	SVMAAPRV	VDGYTKFIREDDCIFEHR	180
Qy	181	FYANDTLG	MLMILA	VMAATHAVY	GULLPEYHR	KCKPVOMPAISQWTFHGPATGQ	240
Db	181	FYANDTLG	MLMILA	VMAATHAVY	GULLPEYHR	KCKPVOMPAISQWTFHGPATGQ	240
Qy	241	AAANNIAG	GRGMP	PTLIGIRONG	HAASRLLIGMBE	VGEKOLGMPFAYITLLFLLIMS	300
Db	241	AAANNIAG	GRGMP	PTLIGIRONG	HAASRLLIGMBE	VGEKOLGMPFAYITLLFLLIMS	300
Qy	301	PYIVACYM	VFYKACAV	PHRYLATAY	MMSPQAQ	AVNPVYCFLLNKDLKKCLTTHAPCWT	360
Db	301	PYIVACYM	VFYKACAV	PHRYLATAY	MMSPQAQ	AVNPVYCFLLNKDLKKCLTTHAPCWT	360
Qy	361	GGAPAPRE	PEYCYM	373			
Db	361	GGAPAPRE	PEYCYM	373			

RESULT 12
US-10-898-329-6

```

Sequence 6 Application US/10899329
Publication No. US20050042683A1
GENERAL INFORMATION:
APPLICANT: Yamamouchi Pharmaceutical Co., Ltd.
TITLE OF INVENTION: A novel G protein coupled receptor protein
FILE REFERENCE: Y9905
CURRENT APPLICATION NUMBER: US/10/899,329
CURRENT FILING DATE: 2004-07-26
PRIOR APPLICATION NUMBER: US/10/318,142
PRIOR FILING DATE: 2002-12-13
PRIOR APPLICATION NUMBER: US/09/622,439
PRIOR FILING DATE: 2000-08-17
PRIOR APPLICATION NUMBER: JP P1998-060245
PRIOR FILING DATE: 1998-03-12
PRIOR APPLICATION NUMBER: JP P1999-026774
PRIOR FILING DATE: 1999-02-03
NUMBER OF SEQ ID NOS: 26
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 6
LENGTH: 373
TYPE: PRT
ORGANISM: Homo sapiens
US-10-898-329-6

```

Query Match	99.7%	Score 1986;	DB 5;	Length 373;
Best Local Similarity	99.7%	Pred. No. 2e-18;		
Matches 372; Conservative	0;	Mismatches 1;	Indels 0;	Gaps 0;

Qy	1	MAANTTGEBEEXGALSPSPSASAYVGLYTLGIMCVSLGNATLSLTVLKERLALHKAPYFE	60
Dp	1	MAANTTGEBEEXGALSPSPSASAYVGLYTLGIMCVSLGNATLSLTVLKERLALHKAPYFE	60
Qy	61	LLDLCIADGIRSAACFPFVLASVHRGSSWTFSSLSCKIVAFMAVLFCHFAFMLFCISVT	120
Dp	61	LLDLCIADGIRSAACFPFVLASVHRGSSWTFSSLSCKIVAFMAVLFCHFAFMLFCISVT	120
Qy	121	RYMAIAHHRFYAKRMTLMTCAAVTCMAVTLVYAMAAPPVYEDVGYTKYFIREDQCIFEHRY	180
Dp	121	RYMAIAHHRFYAKRMTLMTCAAVTCMAVTLVYAMAAPPVYEDVGYTKYFIREDQCIFEHRY	180
Qy	181	EKADDTLGFPMMLAVLMAATTAAYVCKLLFEYRHRKMKPVQNVPAISQWTFHGPATQ	240
Dp	181	EKADDTLGFPMMLAVLMAATTAAYVCKLLFEYRHRKMKPVQNVPAISQWTFHGPATQ	240
Qy	241	AAANWIAFGFGPMPEPTLLGIRONGHAASRLLIGMDVEVGEKQGRMPAITLLFLLTMS	300
Dp	241	AAANWIAFGFGPMPEPTLLGIRONGHAASRLLIGMDVEVGEKQGRMPAITLLFLLTMS	300
Qy	301	PYIYACVYRVFVKACAVBHRYLATAYVMSFAQAAVNPVYCFLLNDKLLKCTLTHAPCWGT	360
Dp	301	PYIYACVYRVFVKACAVBHRYLATAYVMSFAQAAVNPVYCFLLNDKLLKCTLTHAPCWGT	360
Qy	361	GGAPAPREPYCVM 373	
Dp	361	GGAPAPREPYCVM 373	

RESULT 13
US-10-073-885-77
; Sequence 77, Application US/10073885
; Publication No. US20030096346A1

```

1  APPLICANT: Rosen et al.
2  TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
3  FILE REFERENCE: Pj20031
4  CURRENT APPLICATION NUMBER: US/10/073,885
5  CURRENT FILING DATE: 2002-02-14
6  Prior Application removed - See file Wrapper or Palm
7  NUMBER OF SEQ ID NOS: 116
8  SOFTWARE: PatentIn Ver. 2.0
9  SEQ ID NO 77
10 LENGTH: 378
11 TYPE: PRT
12

```

ORGANISM: Homo sapiens
US-10-073-885-77

Query Match 99.7%; Score 1986; DB 4; Length 378;
Best Local Similarity 99.7%; Pred. No. 26-188;
Matches 372; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MANTGEPREVSALSPSPASAYVKLVLLGLIMCVSLAGNALISLVKERALHKAAPYF 60
DB 6 MANTGEPREVSALSPSPASAYVKLVLLGLIMCVSLAGNALISLVKERALHKAAPYF 65
QY 61 LLDLCIADGIRSAVCEPFLVAVRHSSWTFSAISCKIYAFMAVLFCEFAAFMLFCISVT 120
DB 66 LLDLCIADGIRSAVCEPFLVAVRHSSWTFSAISCKIYAFMAVLFCEFAAFMLFCISVT 125
QY 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLISVAMAPPPVFDVGTGYKFIREDQCIFEHRX 180
DB 126 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLISVAMAPPPVFDVGTGYKFIREDQCIFEHRX 185
QY 181 FRANDTLGFMMLAVMAATHAVYKLLIFRYHRKMKVQWVPALISQWTFHGPATQ 240
DB 186 FRANDTLGFMMLAVMAATHAVYKLLIFRYHRKMKVQWVPALISQWTFHGPATQ 245
QY 241 AAANNIAGFGRGMPPTLLGIRONGHAASRLLGMDVKGKQIGRMFYAITLLFLLMS 300
DB 246 AAANNIAGFGRGMPPTLLGIRONGHAASRLLGMDVKGKQIGRMFYAITLLFLLMS 305
QY 301 PYIVACYMRFVYKACAVPHRYLATAVMSPFOAAVNPVFCFLNKKCLTTHAPCWGT 360
DB 306 PYIVACYMRFVYKACAVPHRYLATAVMSPFOAAVNPVFCFLNKKCLTTHAPCWGT 365
QY 361 GGAPAREPYCVM 373
DB 366 GGAPAREPYCVM 378

RESULT 14

US-10-788-197-61
Sequence 61, Application US/10788197
Publication No. US20050032125A1
GENERAL INFORMATION:
APPLICANT: OAKLEY, ROBERT H.
APPLICANT: HUDSON, CHRISTINE C.
TITLE OF INVENTION: CONSTITUTIVE TRANSLOCATING CELL LINE
FILE REFERENCE: NRK 108
CURRENT FILING DATE: 2004-02-26
PRIOR FILING DATE: 2003-05-12
PRIOR FILING DATE: 2003-05-12
PRIOR APPLICATION NUMBER: 60/379,986
PRIOR FILING DATE: 2002-05-13
PRIOR APPLICATION NUMBER: 60/401,698
PRIOR FILING DATE: 2002-08-07
NUMBER OF SEQ ID NOS: 94
SOFTWARE: PatentIn Ver. 3.2
SEQ ID NO 61
LENGTH: 387
TYPE: PRT
ORGANISM: Homo sapiens
US-10-788-197-61

Query Match 99.7%; Score 1986; DB 5; Length 387;
Best Local Similarity 99.7%; Pred. No. 2.1e-188;
Matches 372; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MANTGEPREVSALSPSPASAYVKLVLLGLIMCVSLAGNALISLVKERALHKAAPYF 60
DB 15 MANTGEPREVSALSPSPASAYVKLVLLGLIMCVSLAGNALISLVKERALHKAAPYF 74
QY 61 LLDLCIADGIRSAVCEPFLVAVRHSSWTFSAISCKIYAFMAVLFCEFAAFMLFCISVT 120
DB 75 LLDLCIADGIRSAVCEPFLVAVRHSSWTFSAISCKIYAFMAVLFCEFAAFMLFCISVT 134

QY 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLISVAMAPPPVFDVGTGYKFIREDQCIFEHRX 180
DB 135 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLISVAMAPPPVFDVGTGYKFIREDQCIFEHRX 194
QY 181 FRANDTLGFMMLAVMAATHAVYKLLIFRYHRKMKVQWVPALISQWTFHGPATQ 240
DB 195 FRANDTLGFMMLAVMAATHAVYKLLIFRYHRKMKVQWVPALISQWTFHGPATQ 254
QY 241 AAANNIAGFGRGMPPTLLGIRONGHAASRLLGMDVKGKQIGRMFYAITLLFLLMS 300
DB 255 AAANNIAGFGRGMPPTLLGIRONGHAASRLLGMDVKGKQIGRMFYAITLLFLLMS 314
QY 301 PYIVACYMRFVYKACAVPHRYLATAVMSPFOAAVNPVFCFLNKKCLTTHAPCWGT 360
DB 315 PYIVACYMRFVYKACAVPHRYLATAVMSPFOAAVNPVFCFLNKKCLTTHAPCWGT 374
QY 361 GGAPAREPYCVM 373
DB 375 GGAPAREPYCVM 387

RESULT 15

US-10-505-486-49
Sequence 49, Application US/10505486
Publication No. US20050118639A1
GENERAL INFORMATION:
APPLICANT: Takeda Chemical Industries, Ltd.
TITLE OF INVENTION: Determination of a ligand
FILE REFERENCE: P03-0006PCT
CURRENT FILING DATE: 2004-08-20
PRIOR FILING DATE: 2002-02-22
PRIOR FILING DATE: 2002-02-22
PRIOR APPLICATION NUMBER: JP 2002-213949
PRIOR FILING DATE: 2002-07-23
PRIOR APPLICATION NUMBER: JP 2002-298237
PRIOR FILING DATE: 2002-10-11
NUMBER OF SEQ ID NOS: 233
SEQ ID NO 49
LENGTH: 611
TYPE: PRT
ORGANISM: Human
US-10-505-486-49

Query Match 99.7%; Score 1986; DB 5; Length 611;
Best Local Similarity 99.7%; Pred. No. 3.6e-188;
Matches 372; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MANTGEPREVSALSPSPASAYVKLVLLGLIMCVSLAGNALISLVKERALHKAAPYF 60
DB 1 MANTGEPREVSALSPSPASAYVKLVLLGLIMCVSLAGNALISLVKERALHKAAPYF 60
QY 61 LLDLCIADGIRSAVCEPFLVAVRHSSWTFSAISCKIYAFMAVLFCEFAAFMLFCISVT 120
DB 61 LLDLCIADGIRSAVCEPFLVAVRHSSWTFSAISCKIYAFMAVLFCEFAAFMLFCISVT 120
QY 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLISVAMAPPPVFDVGTGYKFIREDQCIFEHRX 180
DB 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLISVAMAPPPVFDVGTGYKFIREDQCIFEHRX 180
QY 181 FRANDTLGFMMLAVMAATHAVYKLLIFRYHRKMKVQWVPALISQWTFHGPATQ 240
DB 181 FRANDTLGFMMLAVMAATHAVYKLLIFRYHRKMKVQWVPALISQWTFHGPATQ 240
QY 241 AAANNIAGFGRGMPPTLLGIRONGHAASRLLGMDVKGKQIGRMFYAITLLFLLMS 300
DB 241 AAANNIAGFGRGMPPTLLGIRONGHAASRLLGMDVKGKQIGRMFYAITLLFLLMS 300
QY 301 PYIVACYMRFVYKACAVPHRYLATAVMSPFOAAVNPVFCFLNKKCLTTHAPCWGT 360
DB 301 PYIVACYMRFVYKACAVPHRYLATAVMSPFOAAVNPVFCFLNKKCLTTHAPCWGT 360
QY 361 GGAPAREPYCVM 373

Wed Mar 8 15:27:39 2006

us-10-782-596-20.rapbm

Page 9

Db 361 CGAPABREP_CVM 373

Search completed: March 7, 2006, 12:58:41
Job time : 167 secs

THIS PAGE BLANK (USPTO)

Db 241 AANWTAGFGRGMPPTLLGIRONGHAASRLLGMDVKGKOLGMPFAITLLPFLILMS 300
QY 301 PYIVACYWRFVYKACVPHRYLATATVWMSFAOAAVNPVYICFLNKKLCTTHAPCWT 360
Db 301 PYIVACYWRFVYKACVPHRYLATATVWMSFAOAAVNPVYICFLNKKLCTTHAPCWT 360
QY 361 GGAPAREPYCWM 373
Db 361 GGAPAREPYCWM 373

RESULT 2
US-11-040-218-61
Sequence 61, Application US/11040218
Publication No. US20060029983A1
GENERAL INFORMATION:
APPLICANT: OAKLEY, ROBERT H.
APPLICANT: HUDSON, CHRISTINE C.
TITLE OF INVENTION: CONSTITUTIVELY TRANSLOCATING CELL LINE
FILE REFERENCE: NRK.108
CURRENT APPLICATION NUMBER: US/11/040,218
CURRENT FILING DATE: 2005-01-21
PRIOR APPLICATION NUMBER: US/10/788,197
PRIOR FILING DATE: 2004-02-26
PRIOR APPLICATION NUMBER: PCT/US03/14581
PRIOR FILING DATE: 2003-05-12
PRIOR APPLICATION NUMBER: 60/379,986
PRIOR FILING DATE: 2002-05-13
PRIOR APPLICATION NUMBER: 60/401,698
PRIOR FILING DATE: 2002-08-07
NUMBER OF SEQ ID NOS: 94
SOFTWARE: PatentIn Ver. 3.2
SEQ ID NO 61
LENGTH: 387
TYPE: PRT
ORGANISM: Homo sapiens
US-11-040-218-61

Query Match 99.7%; Score 1986; DB 7; Length 387;
Best Local Similarity 99.7%; Pred. No. 1,1e-184;
Matches 372; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 MANTTGEPEVSGALSPPSASAYVKLVLLGLIMCVSLAGNALISLVLKERALHKAPYF 60
Db 15 MANTTGEPEVSGALSPPSASAYVKLVLLGLIMCVSLAGNALISLVLKERALHKAPYF 74
QY 61 LLDLCIADGIRSAVCEPFLASVRHSSWTFSSALCKIYAFMAVLCFHAAPFLFCISVT 120
Db 75 LLDLCIADGIRSAVCEPFLASVRHSSWTFSSALCKIYAFMAVLCFHAAPFLFCISVT 134
QY 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLNVMAAPPVVDGTYKFIREDDCIEHRY 180
Db 135 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLNVMAAPPVVDGTYKFIREDDCIEHRY 194
QY 181 FKANDTLGFMLMLAVLMAATHAVYKLLLFYRHRKMKVQVWPALISQWTFHGPATQ 240
Db 195 FKANDTLGFMLMLAVLMAATHAVYKLLLFYRHRKMKVQVWPALISQWTFHGPATQ 254
QY 241 AANWTAGFGRGMPPTLLGIRONGHAASRLLGMDVKGKOLGMPFAITLLPFLILMS 300
Db 255 AANWTAGFGRGMPPTLLGIRONGHAASRLLGMDVKGKOLGMPFAITLLPFLILMS 314
QY 301 PYIVACYWRFVYKACVPHRYLATATVWMSFAOAAVNPVYICFLNKKLCTTHAPCWT 360
Db 315 PYIVACYWRFVYKACVPHRYLATATVWMSFAOAAVNPVYICFLNKKLCTTHAPCWT 374
QY 361 GGAPAREPYCWM 373
Db 375 GGAPAREPYCWM 387

RESULT 3

US-11-040-218-63
Sequence 63, Application US/11040218
Publication No. US20060029983A1
GENERAL INFORMATION:
APPLICANT: OAKLEY, ROBERT H.
APPLICANT: HUDSON, CHRISTINE C.
TITLE OF INVENTION: CONSTITUTIVELY TRANSLOCATING CELL LINE
FILE REFERENCE: NRK.108
CURRENT APPLICATION NUMBER: US/11/040,218
CURRENT FILING DATE: 2005-01-21
PRIOR APPLICATION NUMBER: US/10/788,197
PRIOR FILING DATE: 2004-02-26
PRIOR APPLICATION NUMBER: PCT/US03/14581
PRIOR FILING DATE: 2003-05-12
PRIOR APPLICATION NUMBER: 60/379,986
PRIOR FILING DATE: 2002-05-13
PRIOR APPLICATION NUMBER: 60/401,698
PRIOR FILING DATE: 2002-08-07
NUMBER OF SEQ ID NOS: 94
SOFTWARE: PatentIn Ver. 3.2
SEQ ID NO 63
LENGTH: 388
TYPE: PRT
ORGANISM: Homo sapiens
US-11-040-218-63

Query Match 95.0%; Score 1893; DB 7; Length 388;
Best Local Similarity 97.8%; Pred. No. 1,1e-175;
Matches 358; Conservative 0; Mismatches 8; Indels 0; Gaps 0;
QY 1 MANTTGEPEVSGALSPPSASAYVKLVLLGLIMCVSLAGNALISLVLKERALHKAPYF 60
Db 1 MANTTGEPEVSGALSPPSASAYVKLVLLGLIMCVSLAGNALISLVLKERALHKAPYF 60
QY 61 LLDLCIADGIRSAVCEPFLASVRHSSWTFSSALCKIYAFMAVLCFHAAPFLFCISVT 120
Db 61 LLDLCIADGIRSAVCEPFLASVRHSSWTFSSALCKIYAFMAVLCFHAAPFLFCISVT 120
QY 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLNVMAAPPVVDGTYKFIREDDCIEHRY 180
Db 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLNVMAAPPVVDGTYKFIREDDCIEHRY 180
QY 181 FKANDTLGFMLMLAVLMAATHAVYKLLLFYRHRKMKVQVWPALISQWTFHGPATQ 240
Db 181 FKANDTLGFMLMLAVLMAATHAVYKLLLFYRHRKMKVQVWPALISQWTFHGPATQ 240
QY 241 AANWTAGFGRGMPPTLLGIRONGHAASRLLGMDVKGKOLGMPFAITLLPFLILMS 300
Db 241 AANWTAGFGRGMPPTLLGIRONGHAASRLLGMDVKGKOLGMPFAITLLPFLILMS 300
QY 301 PYIVACYWRFVYKACVPHRYLATATVWMSFAOAAVNPVYICFLNKKLCTTHAPCWT 360
Db 301 PYIVACYWRFVYKACVPHRYLATATVWMSFAOAAVNPVYICFLNKKLCTTHAPCWT 360
QY 361 GGAPAREPYCWM 366
Db 361 GGAPAREPYCWM 366

RESULT 4
US-11-040-218-65
Sequence 65, Application US/11040218
Publication No. US20060029983A1
GENERAL INFORMATION:
APPLICANT: OAKLEY, ROBERT H.
APPLICANT: HUDSON, CHRISTINE C.
TITLE OF INVENTION: CONSTITUTIVELY TRANSLOCATING CELL LINE
FILE REFERENCE: NRK.108
CURRENT APPLICATION NUMBER: US/11/040,218
CURRENT FILING DATE: 2005-01-21
PRIOR APPLICATION NUMBER: US/10/788,197
PRIOR FILING DATE: 2004-02-26
PRIOR APPLICATION NUMBER: PCT/US03/14581

PRIOR FILING DATE: 2003-05-12
PRIOR APPLICATION NUMBER: 60/379,986
PRIOR FILING DATE: 2002-05-13
PRIOR APPLICATION NUMBER: 60/401,698
PRIOR FILING DATE: 2002-08-07
NUMBER OF SEQ ID NOS: 94
SOFTWARE: Patentin Ver. 3.2
SEQ ID NO 65
LENGTH: 402
TYPE: PRT
ORGANISM: Homo sapiens
US-11-040-218-65

Query Match 95.0%; Score 1893; DB 7; Length 402;
Best Local Similarity 97.8%; Pred. No. 1,1e-175;
Matches 358; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 1 MANTGEPREVSALSPSASAYVKLVLLGLIMCVSLAGNAIISLVKERALHKAARYF 60
DB 15 MANTGEPREVSALSPSASAYVKLVLLGLIMCVSLAGNAIISLVKERALHKAARYF 74
QY 61 LLDLCLADGIRSAVCPFPVLASVRGSSWTFSLCKIYAFMAVLFCHAAFMFCISVT 120
DB 75 LLDLCLADGIRSAVCPFPVLASVRGSSWTFSLCKIYAFMAVLFCHAAFMFCISVT 134
QY 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLVMAAPFPVDFVGYKFIREDQCFEHR 180
DB 135 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLVMAAPFPVDFVGYKFIREDQCFEHR 194
QY 181 FRANDTLGFMMLAVLMAAETHAVYKLLPEYHRHRKQVQVPAISQWTFHGPAGTQ 240
DB 195 FRANDTLGFMMLAVLMAAETHAVYKLLPEYHRHRKQVQVPAISQWTFHGPAGTQ 254
QY 241 AAANNIAGRGMPPTLLGIRONGHAASRLIGMDEVKGEKOLGMPFATITLLFLLMS 300
DB 255 AAANNIAGRGMPPTLLGIRONGHAASRLIGMDEVKGEKOLGMPFATITLLFLLMS 314
QY 301 PYIVACYRVFVKACVPHRYLATAVMMSFAQAAVNPVCFILNKKCLTTTHAPCW 360
DB 315 PYIVACYRVFVKACVPHRYLATAVMMSFAQAAVNPVCFILNKKCLTTTHAPCAA 374
QY 361 GGAPAP 366
DB 375 RGRTTP 380

RESULT 5
US-11-040-218-67
Sequence 67, Application US/11040218
Publication No. US20060029983A1

GENERAL INFORMATION:
APPLICANT: OAKLEY, ROBERT H.
APPLICANT: HUDSON, CHRISTINE C.
TITLE OF INVENTION: CONSTITUTIVELY TRANSLOCATING CELL LINE
FILE REFERENCE: NRK.108
CURRENT APPLICATION NUMBER: US/11/040,218
CURRENT FILING DATE: 2005-01-21
PRIOR APPLICATION NUMBER: US/10/788,197
PRIOR FILING DATE: 2004-02-26
PRIOR APPLICATION NUMBER: PCT/US03/14581
PRIOR FILING DATE: 2003-05-12
PRIOR APPLICATION NUMBER: 60/379,986
PRIOR FILING DATE: 2002-05-13
PRIOR APPLICATION NUMBER: 60/401,698
PRIOR FILING DATE: 2002-08-07
NUMBER OF SEQ ID NOS: 94
SOFTWARE: Patentin Ver. 3.2
SEQ ID NO 67
LENGTH: 370
TYPE: PRT
ORGANISM: Homo sapiens
US-11-040-218-67

Query Match 64.7%; Score 1288.5; DB 7; Length 370;
Best Local Similarity 62.7%; Pred. No. 3,4e-117;
Matches 235; Conservative 56; Mismatches 77; Indels 7; Gaps 4;

QY 1 MANTGEPREVSALSPSASAYVKLVLLGLIMCVSLAGNAIISLVKERALHKAARYF 60
DB 1 MANTGEPREVSALSPSASAYVKLVLLGLIMCVSLAGNAIISLVKERALHKAARYF 58
QY 61 LLDLCLADGIRSAVCPFPVLASVRGSSWTFSLCKIYAFMAVLFCHAAFMFCISVT 120
DB 59 LLDLCCSDILRSALICFPFVNSVKNSTWYGTCTKVAIFGLVLSCHFAFMFCISVT 118
QY 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLVMAAPFPVDFVGYKFIREDQCFEHR 180
DB 119 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLVMAAPFPVDFVGYKFIREDQCFEHR 178
QY 181 FRANDTLGFMMLAVLMAAETHAVYKLLPEYHRHRKQVQVPAISQWTFHGPAGTQ 240
DB 179 FRANDTLGFMMLAVLMAAETHAVYKLLPEYHRHRKQVQVPAISQWTFHGPAGTQ 238
QY 241 AAANNIAGRGMPPTLLGIRONGHAASRLIGMDEVKGEKOLGMPFATITLLFLLMS 299
DB 239 AAANNIAGRGMPPTLLGIRONGHAASRLIGMDEVKGEKOLGMPFATITLLFLLMS 298
QY 300 PYIVACYRVFVKACVPHRYLATAVMMSFAQAAVNPVCFILNKKCLTTTHAPCW 358
DB 299 PYIVACYRVFVKACVPHRYLATAVMMSFAQAAVNPVCFILNKKCLTTTHAPCW 357
QY 359 GGAPAP 373
DB 358 --RKSRLEPREYCVI 370

RESULT 6
US-11-040-218-69
Sequence 69, Application US/11040218
Publication No. US20060029983A1
GENERAL INFORMATION:
APPLICANT: OAKLEY, ROBERT H.
APPLICANT: HUDSON, CHRISTINE C.
TITLE OF INVENTION: CONSTITUTIVELY TRANSLOCATING CELL LINE
FILE REFERENCE: NRK.108
CURRENT APPLICATION NUMBER: US/11/040,218
CURRENT FILING DATE: 2005-01-21
PRIOR APPLICATION NUMBER: US/10/788,197
PRIOR FILING DATE: 2004-02-26
PRIOR APPLICATION NUMBER: PCT/US03/14581
PRIOR FILING DATE: 2003-05-12
PRIOR APPLICATION NUMBER: 60/379,986
PRIOR FILING DATE: 2002-05-13
PRIOR APPLICATION NUMBER: 60/401,698
PRIOR FILING DATE: 2002-08-07
NUMBER OF SEQ ID NOS: 94
SOFTWARE: Patentin Ver. 3.2
SEQ ID NO 69
LENGTH: 384
TYPE: PRT
ORGANISM: Homo sapiens
US-11-040-218-69

Query Match 64.7%; Score 1288.5; DB 7; Length 384;
Best Local Similarity 62.7%; Pred. No. 3,5e-117;
Matches 235; Conservative 56; Mismatches 77; Indels 7; Gaps 4;

QY 1 MANTGEPREVSALSPSASAYVKLVLLGLIMCVSLAGNAIISLVKERALHKAARYF 60
DB 15 MANTGEPREVSALSPSASAYVKLVLLGLIMCVSLAGNAIISLVKERALHKAARYF 72
QY 61 LLDLCLADGIRSAVCPFPVLASVRGSSWTFSLCKIYAFMAVLFCHAAFMFCISVT 120
DB 73 LLDLCCSDILRSALICFPFVNSVKNSTWYGTCTKVAIFGLVLSCHFAFMFCISVT 132
QY 121 RYMAIAHHRFYAKRMTLMTCAAVICMAWTLVMAAPFPVDFVGYKFIREDQCFEHR 180

```
Db 133 RYLAIAHHRFYKRLTFMTCLAVICMWTLISVAMA.FPPLYLDVGTSPFIREBQCTFOHRS 192
Qy 181 FRANDTLGFMMLAVLMAATHAVYKLLFEYRHRKMKVQVNPALISQWTFHGGATGQ 240
Db 193 FRANDSLGFMMLALILATOLVYLKLFVHDRRKKKPVQFVAASQWTFHGGASGQ 252
Qy 241 AAANMAGRGMPPTLLGIRONGHAAS-RLLGMDVEYKGEQOLGRMFYATLLFLILLM 299
Db 253 AAANMLAGRGPTPTLLGIRONANTTGRRLVLVDEFKMRKISRMYITMFLFLTM 312
Qy 300 SEPIVACYWRVFAKCAVHRVLTAVWMSFAQAAVNPVCFLLNKDKKL-THAPCW 358
Db 313 GPLYVACYWRVFAKCAVHRVLTAVWMSFAQAGINPVCIFSNRELRCFSTLLYC- 371
Qy 359 GTGAPAPREPYCVM 373
Db 372 --RKSRLPREPYCVI 384

RESULT 7
US-11-040-218-71
; Sequence 71, Application US/11040218
; Publication No. US20060029983A1
; GENERAL INFORMATION:
; APPLICANT: OAKLEY, ROBERT H.
; TITLE OF INVENTION: CONSTITUTIVELY TRANSLOCATING CELL LINE
; FILE REFERENCE: NRK.108
; CURRENT APPLICATION NUMBER: US/11/040,218
; PRIOR FILING DATE: 2005-01-21
; PRIOR APPLICATION NUMBER: US/10/788,197
; PRIOR FILING DATE: 2004-02-26
; PRIOR APPLICATION NUMBER: PCT/US03/14581
; PRIOR FILING DATE: 2003-05-12
; PRIOR APPLICATION NUMBER: 60/379,986
; PRIOR FILING DATE: 2002-05-13
; PRIOR APPLICATION NUMBER: 60/401,698
; PRIOR FILING DATE: 2002-08-07
; NUMBER OF SEQ ID NOS: 94
; SOFTWARE: PatentIn Ver. 3.2
; SEQ ID NO 71
; LENGTH: 388
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-040-218-71

Query Match 63.6%; Score 1266; DB 7; Length 388;
Best Local Similarity 62.5%; Pred. No. 5,4e-115;
Matches 230; Conservative 54; Mismatches 80; Indels 4; Gaps 3;

Qy 1 MANTGEPREVSALSPPSASAYKVLGLIMCVSLAGNAIISLVKERALHKAPYF 60
Db 1 MANYSHADNIIONLSP--LTAFLKLTSLGFIIGSVGNLLISILVXDKTLHRAPIYF 58
Qy 61 LLDLCIADGIRSAVCPPEVLASVRHGSWTFESALCKIYAFMAVLPCFHAFPLFCISYT 120
Db 59 LLDLCCSDILRSALICFPFVNSVKNSTWYGLTCKVIAFLGVLSCFHTAFMLFCISYT 118
Qy 121 RYMAIAHHRFYKRLTFMTCLAVICMWTLISVAMAFPPVLDVGTSPFIREBQCTFOHRS 180
Db 119 RYLAIAHHRFYKRLTFMTCLAVICMWTLISVAMAFPPVLDVGTSPFIREBQCTFOHRS 178
Qy 181 FRANDTLGFMMLAVLMAATHAVYKLLFEYRHRKMKVQVNPALISQWTFHGGATGQ 240
Db 179 FRANDSLGFMMLALILATOLVYLKLFVHDRRKKKPVQFVAASQWTFHGGASGQ 238
Qy 241 AAANMAGRGMPPTLLGIRONGHAAS-RLLGMDVEYKGEQOLGRMFYATLLFLILLM 299
Db 239 AAANMLAGRGPTPTLLGIRONANTTGRRLVLVDEFKMRKISRMYITMFLFLTM 298
Qy 300 SEPIVACYWRVFAKCAVHRVLTAVWMSFAQAAVNPVCFLLNKDKKL-THAPCW 358
Db 372 --RKSRLPREPYCVI 384
```

```
Db 299 GPLYVACYWRVFAKCAVHRVLTAVWMSFAQAGINPVCIFSNRELRCFSTLLYC 358
Qy 359 GTGAPAP 366
Db 359 AARGRTTP 366

RESULT 8
US-11-040-218-73
; Sequence 73, Application US/11040218
; Publication No. US20060029983A1
; GENERAL INFORMATION:
; APPLICANT: OAKLEY, ROBERT H.
; TITLE OF INVENTION: CONSTITUTIVELY TRANSLOCATING CELL LINE
; FILE REFERENCE: NRK.108
; CURRENT APPLICATION NUMBER: US/11/040,218
; PRIOR FILING DATE: 2005-01-21
; PRIOR APPLICATION NUMBER: US/10/788,197
; PRIOR FILING DATE: 2004-02-26
; PRIOR APPLICATION NUMBER: PCT/US03/14581
; PRIOR FILING DATE: 2003-05-12
; PRIOR APPLICATION NUMBER: 60/379,986
; PRIOR FILING DATE: 2002-05-13
; PRIOR APPLICATION NUMBER: 60/401,698
; PRIOR FILING DATE: 2002-08-07
; NUMBER OF SEQ ID NOS: 94
; SOFTWARE: PatentIn Ver. 3.2
; SEQ ID NO 73
; LENGTH: 402
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-040-218-73

Query Match 63.6%; Score 1266; DB 7; Length 402;
Best Local Similarity 62.5%; Pred. No. 5,6e-115;
Matches 230; Conservative 54; Mismatches 80; Indels 4; Gaps 3;

Qy 1 MANTGEPREVSALSPPSASAYKVLGLIMCVSLAGNAIISLVKERALHKAPYF 60
Db 15 MANYSHADNIIONLSP--LTAFLKLTSLGFIIGSVGNLLISILVXDKTLHRAPIYF 72
Qy 61 LLDLCIADGIRSAVCPPEVLASVRHGSWTFESALCKIYAFMAVLPCFHAFPLFCISYT 120
Db 73 LLDLCCSDILRSALICFPFVNSVKNSTWYGLTCKVIAFLGVLSCFHTAFMLFCISYT 132
Qy 121 RYMAIAHHRFYKRLTFMTCLAVICMWTLISVAMAFPPVLDVGTSPFIREBQCTFOHRS 180
Db 133 RYLAIAHHRFYKRLTFMTCLAVICMWTLISVAMAFPPVLDVGTSPFIREBQCTFOHRS 192
Qy 181 FRANDTLGFMMLAVLMAATHAVYKLLFEYRHRKMKVQVNPALISQWTFHGGATGQ 240
Db 193 FRANDSLGFMMLALILATOLVYLKLFVHDRRKKKPVQFVAASQWTFHGGASGQ 252
Qy 241 AAANMAGRGMPPTLLGIRONGHAAS-RLLGMDVEYKGEQOLGRMFYATLLFLILLM 299
Db 253 AAANMLAGRGPTPTLLGIRONANTTGRRLVLVDEFKMRKISRMYITMFLFLTM 312
Qy 300 SEPIVACYWRVFAKCAVHRVLTAVWMSFAQAAVNPVCFLLNKDKKL-THAPCW 358
Db 313 GPLYVACYWRVFAKCAVHRVLTAVWMSFAQAGINPVCIFSNRELRCFSTLLYC 372
Qy 359 GTGAPAP 366
Db 373 AARGRTTP 380

RESULT 9
US-11-165-024-3
; Sequence 3, Application US/11165024
; Publication No. US20050266527A1
; GENERAL INFORMATION:
; APPLICANT: Li et al.
```

```

: TITLE OF INVENTION: Human G-Protein Receptor HIBER51
: FILE REFERENCE: PFI87D1C2
: CURRENT APPLICATION NUMBER: US/11/165,024
: CURRENT FILING DATE: 2005-06-24
: PRIOR APPLICATION NUMBER: US 10/006,394
: PRIOR FILING DATE: 2001-12-10
: PRIOR APPLICATION NUMBER: US 09/228,420
: PRIOR FILING DATE: 1999-01-12
: PRIOR APPLICATION NUMBER: US 08/465,971
: PRIOR FILING DATE: 1995-06-06
: NUMBER OF SEQ ID NOS: 9
: SOFTWARE: PatentIn version 3.3
: SEQ ID NO 3
: LENGTH: 350
: TYPE: prt
: ORGANISM: Homo sapiens
: US-11-165-024-3

```

Query Match	13.0%;	Score 259.5;	DB 7;	Length 350;
Best Local Similarity	24.0%;	Pred. No. 1.3e-17;		
Matches 86;	Conservative 63;	Mismatches 166;	Indels 43;	Gaps 11.

Qy	2	ANTGEPEVBSALSP--SASAIVYLV--LLGIMCSLGNMILSLVKEPRLKAPY	59
Db	11	ASWNTGEAPGGGARATPVYSLOVTLTLVLCIAGLMLTLVGNVITIAVTSRLKAPOML	70
Qy	60	FLUDCLADGIRSAVCFPEVLASVHRSSMFTSALSCKIVAFMAVLFCFHAAMLCISV	119
Db	71	FLVLSASADIVATLVIPFSLANEVWG--YWGKAMCELYLADVLFCSSIVLHCALISL	129
Qy	120	TRYMAIAHRRFYAKMTLWTCAAVICMAWTLSSVNAAPPEVFDV---GTYKPIREDDOC	174
Db	130	DRWYSITQAEVNLKRTPRIRKIIITVIVISAVISFPFLISIEKKGGGGGPQAPPRE	189
Qy	175	IPEHRYFRANDTLGFMLMLAVLMAATHAVYGLLLFEYHRKKPKPVOMVPAISOQNTFHG	234
Db	190	INDQKMYVSISSCIGSFAPCLIMI--LVYVRIYQIAKQRTVRPBR-----RG	235
Qy	235	FGATGQAANNAIAGGGRGMPPTLLIGIRONGHAAS---RRLIGMDEVKSEKOLGRMFYAI	291
Db	236	PDAVA-----APPG--GLQGRGRSASGLPRRRAGAGQONREKRTFVLAVV	279
Qy	292	TLLLELLMSPIYVACYMRVFKACVAPRHXYLATPAVMSFAQAAVNPVIFCLLNDKOLKK	349
Db	280	IGVFVACMPPEFT--YTLTAVGCSVPRTLKRFPEFGCNSLNEVITITTFHNDRR	335

```

RESULT 10
US-10-995-561-901
; Sequence 901; Application US/10995561
; Publication No. US20050272054A1
; GENERAL INFORMATION:
; APPLICANT: CARGILL, Michele et al.
; TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH
; TITLE OF INVENTION: CARDIOVASCULAR DISORDERS AND DRUG RESPONSE, METHODS OF
; TITLE OF INVENTION: DETECTION AND USES THEREOF
; FILE REFERENCE: CLO01559
; CURRENT APPLICATION NUMBER: US/10/995,561
; CURRENT FILING DATE: 2004-11-24
; NUMBER OF SEQ ID NOS: 85702
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 901
; LENGTH: 471
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-995-561-901

```

```

Query Match: 12.9%; Score 257; DB 6; Length 471;
Best Local Similarity: 23.9%; Pred. No. 3.1e-17;
Matches 90; Conservative 63; Mismatches 155; Indels 68; Gaps 13.

13 GATSPPSASAY-----VKLVLTGLGIMCVSLAGNAIILSLVYKERALHKAPYFLLDCTL 66
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
|::: :::: ||| ::: |::| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||

```

```

Db      59  GCLSPSCSLHLÖCKNMSALTAVIITLITAGNILLVIAVSGLEKTLÖQATNFYELMSLAI 118
Qy      67  ADGIRSAVCPPEVTLASVRHGSSWTSLSCKVAFMAVAVL.FCHHAAMLFCISSTRMATA 126
Db      119  ADMLGLFVMEPSMILTILYGRWMPSPSKCAWMIYLDVLFSTASIMHLCAISIDRYVALIO 178
Qy      127  ---HHRFYAKRMTLMTCAAVTCMAWTLSSVMAAF-PVPDVGYKRFIREBDCIF-EHRY 160
Db      179  NPIHRSRNSRKAFKLIIIV---WTLISVGLSMPIPVGGLDDDSKVYFBGSLCLADDNF 234
Qy      181  FKANDTLGFMMLAVIAMATHAVYKLLLFEX-----RHRKMPQVMVPAIS----- 227
Db      235  VLISGFVFFPIPLTI-WITTYFLITKSLOKEATLCSYSDGTRAKLASFBLPOSSLSEK 293
Qy      228  --QWTFHGPGA-TQOAAAMVIAGFGRGMPBPTLLGIRONGHAASRLLGMBDEVKGEKOL 284
Db      294  LFORSIHREPGSYTORRTMQIS-----NEOKKCKVL 345
Qy      285  GRMFAITLLPULLMSPYIVACRYFVK-AC-AVPHRYLATVYMSFAQAAVNPVYCF 341
Db      326  GIVFE---LFWVMCCPFITINIMAVICKESCNEVDIGALLNVFWIIGYLSAANPLVYT 361
Qy      342  LNKDLKKCLTTHAPC 357
Db      382  LFNKTYBSAFSKRYIOC 397

```

```

RESULT 11
US-10-875-716-10
; Sequence 10, Application US/10875716
; Publication No. US20050266522A1
; GENERAL INFORMATION:
; APPLICANT: Li et al.
; TITLE OF INVENTION: Human Amine Receptor
; FILE REFERENCE: P188D1C2
; CURRENT APPLICATION NUMBER: US/10/875,716
; CURRENT FILING DATE: 2004-06-25
; PRIOR APPLICATION NUMBER: US 09/988,745
; PRIOR FILING DATE: 2001-11-20
; PRIOR APPLICATION NUMBER: US 09/314,006
; PRIOR FILING DATE: 1999-05-19
; PRIOR APPLICATION NUMBER: US 08/467,559
; PRIOR FILING DATE: 1995-06-06
; NUMBER OF SEQ ID NOS: 10
; SEQ ID NO 10
; LENGTH: 353
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-875-716-10

```

Query Match	Similarity	12.1%	Score 241.5;	DB 6;	length 353;
Best Local Match	Similarity	22.3%;	Pred. No. 76-16;		
Matches	Conservative	82;	Mismatches 152;	Indels 69;	Gaps 11
Qy	13	GALSPSASAYKVLVGLIMCVSLAGNAISLVYKRALHKAPYFLDLCLADGRS	72		
Db	18	GKADRPHTNYA--TLTLTLAVIVFGVNLVCMVSRREKALQTTNTYIVISLVADLLVA	75		
Qy	73	AVCFPEVLAASVRHSSWTFSAISCKIVFMAYLFCFHAFMLFCISVRYMAIA-----H	127		
Db	76	TLVNPWVYVLEVG--EWFESRIHCDIFTLDVMVCTAIIWCAISIDRYAVANPMLYN	134		
Qy	128	HRPAKQMTLWTCNAVICMAVTLVSANAFPPVFDVGTYKFRBEDQCIFEHRYFQANDTL	187		
Db	135	TRYSSKRV---TWMSIVLVLSFTISCPILFGIANT---ADONECIANPAFAVYSSI	186		
Qy	188	GFMLMLAVLMATAHYVGGKLLFEYRHKQKRPVQWPAISONTWTFHGANGAQAANMAIA	247		
Db	187	---VSFYVPFIVTLIVYIKIYIVLRRRKRNVTK---RSSSAFRAHLAPALKEAAR---	237		
Qy	248	GFGRGMPPTLLIGRONGHA-----ASRLLGDHDEVGCE	281		
Db	238	-----EKGNHAADHPKIAKI FEIQTPNGKTRTSLKTMSSRRKLSOOK---E	280		

Query Match 11.1%; Score 220.5; DB 7; Length 429;
 Best Local Similarity 21.0%; Pred. No. 9.5e-14;
 Matches 88; Conservative 61; Mismatches 162; Indels 109; Gaps 12;

```

QY 1 MANTGPEPEVSGALSPPSASAYVKVLGLIM---CVSLAGNALISLVLERALHKA 56
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
DB 1 MYFLSGNASDSSNCTOPPAVNVISKAIIIGVILGILFQVIGNIIVILSVACHRHLSHV 60
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
QY 57 PYFLLDLCLADGIRAVCFPF-----VLASVHSGSWTFSALSCIVAFMVLFCFHAA 111
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
DB 61 THYYIVNLAVADLLITSTVLPFSAIFEVL-----GYMAFGRVFCNIMAVDVLCTTASI 114
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
QY 112 FMFCISVTRYMAIAHHRFAKMTLMTCAAVICMAWTLISVAMAPPEVDVTYKFTREE 171
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
DB 115 MGLCISIDRIYIGVSYPRLRYPTVTQRRGIMALLCYWALSLVSIQPLFG--WRQPAPE 171
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
QY 172 DQCFEHRFYKANDTLGFMLMLA-----VLMATHAVYKLLFEYR----- 213
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
DB 172 DETTCQ-----INBEPGYVLFPSALGSFYLPALIIIVWYCRVYVAKRESRGLSKGLKTDK 226
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
QY 214 -----HRMKPVQWVPALISQWTFHGPATGOAANMIAGFGRPMPPTLLGIRO 263
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
DB 227 SDEQVTLRIHRKNAPA-----GSGMASA-----KT 253
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
QY 264 NGHASRRLIGMDEVGKQIGRMFYAITLLFLLMSPYIVACYWRFVYKACAVPHRYLA 323
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
DB 254 KTHFSVRLKFSREKKAATLG---IVGCFVLCPFLVMPIGSFPPDEKPSSETVRK 309
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
QY 324 TAVMSFQAQAVNPVPCFLINKDLK-----CL-----TTAAPCMGTG 362
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
DB 310 IVFMILGYLNSCINPIIYPCSSQEFKAFQVNLRIQCLRRKQSSKHALGYTLHPPSQAVEG 369
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |

```

RESULT 15

US-11-127-877-50
 ; Sequence 50, Application US//1127877
 ; Publication No. US20050287565A1

```

; GENERAL INFORMATION:
; APPLICANT: Merckle, Pascal G.
; APPLICANT: Hoffmann, Marcel
; APPLICANT: Spitznagel, Koentraad F. F.
; APPLICANT: Laenen, Wendy
; TITLE OF INVENTION: Methods, Compositions and Compound Assays for Inhibiting
; FILE OF INVENTION: Amyloid-Beta Protein Production
; FILE REFERENCE: P27, 800-B USA
; CURRENT APPLICATION NUMBER: US/11/127,877
; PRIOR FILING DATE: 2005-05-12
; PRIOR APPLICATION NUMBER: 60/570,352
; PRIOR FILING DATE: 2004-05-12
; PRIOR APPLICATION NUMBER: 60/603,948
; NUMBER OF SEQ ID NOS: 590
; SOFTWARE: Patent version 3.3
; SEQ ID NO 50
; LENGTH: 466
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-11-127-877-50

```

Query Match 11.1%; Score 220.5; DB 7; Length 466;
 Best Local Similarity 21.0%; Pred. No. 1e-13;
 Matches 88; Conservative 61; Mismatches 162; Indels 109; Gaps 12;

```

QY 1 MANTGPEPEVSGALSPPSASAYVKVLGLIM---CVSLAGNALISLVLERALHKA 56
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
DB 1 MYFLSGNASDSSNCTOPPAVNVISKAIIIGVILGILFQVIGNIIVILSVACHRHLSHV 60
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
QY 57 PYFLLDLCLADGIRAVCFPF-----VLASVHSGSWTFSALSCIVAFMVLFCFHAA 111
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
DB 61 THYYIVNLAVADLLITSTVLPFSAIFEVL-----GYMAFGRVFCNIMAVDVLCTTASI 114
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
QY 112 FMFCISVTRYMAIAHHRFAKMTLMTCAAVICMAWTLISVAMAPPEVDVTYKFTREE 171
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |

```

```

DB 115 MGLCISIDRIYIGVSYPRLRYPTVTQRRGIMALLCYWALSLVSIQPLFG--WRQPAPE 171
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
QY 172 DQCFEHRFYKANDTLGFMLMLA-----VLMATHAVYKLLFEYR----- 213
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
DB 172 DETTCQ-----INBEPGYVLFPSALGSFYLPALIIIVWYCRVYVAKRESRGLSKGLKTDK 226
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
QY 214 -----HRMKPVQWVPALISQWTFHGPATGOAANMIAGFGRPMPPTLLGIRO 263
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
DB 227 SDEQVTLRIHRKNAPA-----GSGMASA-----KT 253
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
QY 264 NGHASRRLIGMDEVGKQIGRMFYAITLLFLLMSPYIVACYWRFVYKACAVPHRYLA 323
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
DB 254 KTHFSVRLKFSREKKAATLG---IVGCFVLCPFLVMPIGSFPPDEKPSSETVRK 309
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
QY 324 TAVMSFQAQAVNPVPCFLINKDLK-----CL-----TTAAPCMGTG 362
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
DB 310 IVFMILGYLNSCINPIIYPCSSQEFKAFQVNLRIQCLRRKQSSKHALGYTLHPPSQAVEG 369
   | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |

```

Search completed: March 7, 2006, 12:59:07
 Job time : 22 secs

THIS PAGE BLANK (USPTO)